Construction News

★Denotes work advertised in ENGINEERING NEWS.
✚Denotes contract awarded. The names of bidders awarded contracts are set in CAPITALS.

A STEADY VOLUME OF BUSINESS

The ability of business to withstand the severe shocks which occurred during May, indicates clearly the firm foundation which underlies the general structure. Although the newspapers in the United States are calling attention to the dire possibilities that might result from international complications, there has been no postponement of business already under way—no engineering contracts, as far as can be learned, have been postponed for this reason—and while there was a temporary halt in the volume of new business, this has almost all disappeared and increased activity is making steady headway. As far as the general business situation is concerned, it was better on June 1 than on May 1. More men are at work, more projects are planned, and there is more confidence that business this year will show a steady gain. Contracts for certain commodities have been made for delivery well into 1916, and the business world is taking a long look ahead.

Foreign orders make up an unusually large proportion of the business taken by those in the metal trades. First of importance come the orders for necessary war materials, and more than fifty manufacturers in the United States are turning out shrapnel alone. In addition to this, many shops are rushed to capacity, making tools for the manufacture of such materials, to say nothing of the chemical industry and the great stimulation to the metal trade. That so great an amount of business could be placed was not believed by those familiar with the amount of material usually required by armies. Aside from the orders calling for strict munitions of war, vast quantities of barbed wire and materials which will be used by civilian population, but which cannot be made in the countries now at war, are required. All these are swelling the foreign business of the United States to figures hitherto scarcely thought possible.

Russia has been an extremely large purchaser of railway equipment, including rails, and it is probable that more rolling stock and motive power will have to be purchased in this country, as heretofore most of the material of this character came from Germany; Russian manufacturing facilities, even in times of peace, are totally inadequate to care for the demand.

In the iron trade, business has increased steadily, that is, the operation at the mills, and the leading manufacturer of iron and steel products, whose operations perhaps are on a slightly smaller scale than those of other steel manufacturers, is running his plant at the rate of about 75% of capacity. Prices have remained practically stationary, although an advance in galvanized sheets is noted, this being due purely to the increase in the cost of spelter. Bessemer iron moved up 15c. a ton in the last week in the month, and seems to be in much better demand. The speculative interests which purchased a large tonnage of Southern foundry iron have not been able to dispose of it at a profit. Activity in the line of large bars and forging shapes is especially pronounced. There is likewise an increase in the demand for steel plates for shipbuilding purposes. Structural steel work is more active, the fabricating shops of the country operating at about 62% of capacity, compared with 32% in the dullest time last year. The rapid progress being made on the steel work in New York City for the extension of the subways and elevated lines is responsible for considerable of this activity, but a great many railroads are replacing bridges as rapidly as their funds will allow. A good deal of the work, too, comes from county commissioners for small highway bridges.

Rapid advances in the prices of metals have carried quotations to levels hitherto scarcely believed possible. The most spectacular advance has been in spelter. This metal, which was selling at 14½ to 15c. a month ago, and 7c. a year ago, is now quoted at 21c., and there is scarcely any to be had. For the first time in the history of the metal trade, the price of spelter was higher than that of copper. This advance caused corresponding increases in the price of brass and brass products; lead has advanced $6 per ton; antimony is practically unobtainable. The unusual prices have brought about great activity in zinc smelting works, and plants long disused are being pressed into service.

Never before in the history of the United States has the financial situation been so intrinsically sound. The new banking system has been in operation long enough to prove its worth; a stock of gold has been accumulated far beyond the needs of present trade or anything that is likely to take place this year; and American bankers are financing foreign governments and shipments of foreign goods. Current liabilities of foreign merchants on "acceptances" amount to more than $120,000,000, compared with only nominal figures a year ago, and bid fair to increase rapidly. The sale of long-term bonds is slow, most investors preferring to await developments. This, of course, will retard much construction work, which cannot be carried on with high capital charges.

A conference of delegates from the Pan American states is now in the United States, and this continent bids fair to extend American trade in South America and place it on a permanent basis, for in connection with the sale of American goods, efforts, not without result, are being made to finance them in foreign countries. A delegation from China is spending two months in the United States, studying manufacturing and trade facilities.

Railroad buying has been on a larger scale. The number of cars ordered in May would total about 30,000, which is more than for the entire six months preceding. The buying of railway equipment, however, has been below normal for nearly two years. Some buying of rails has taken place, but not any large amounts.

LABOR

A shortage of labor, particularly for construction work, and rough labor around mills and factories, is likely to occur later in the year, and the demands of the unions will perhaps be more unreasonable than ever before.

One contractor, at least, who secures most of his labor from New York, has asked an agency to send him men at $2 per day. This, of course, is an unusual price, and it is possible that many orders could be filled, just at present, at $1.75 per day. The matter of labor, however, is going to be a most serious consideration for contractors and manufacturers before the end of the year. Everything points to a shortage of rough labor, such as now exists in the skilled labor market. It may, perhaps, be due to some not being familiar with the machine tool industry, but men who can operate machine tools are in demand at more than ordinary wages, particularly foremen who can handle large bodies of men and get out production. It will not be a question of "at what price," but rather "can the labor be obtained." With the entrance of Italy into the war, there will be no more Italian labor coming to this country, and practically none has arrived since Aug. 1, 1914. When it is recalled that nearly a million immigrants enter each year, and a goodly proportion of these are laborers who find their way to the ranks of the construction companies, the cutting off of this important source of supply can be realized. At present, only a few of the large companies seem to have taken the matter seriously. One of the largest companies in the United States has steadfastly refused to make extensive contracts for distant delivery at any price whatever, solely for the reason that it can not foretell what the labor market will be. Some companies were so farsighted in the latter part of 1914 that, while they could have reduced wages and had the reduction accepted practically without any opposition, they declined to do so, and the reason is now apparent. They wished to keep the workers in the vicinity of their own plants, even though it were idle, for nothing induces a workman to migrate more quickly than a cut in wages. They will stand unemployment and live, but when wages are cut, they almost invariably seek other locations, and in some cases other lines of employment.

It is more than possible that a greater proportion of female labor will be employed in factories than ever before.

CEMENT, LIME AND BRICK

Portland Cement—Practically no change is found in the market. The mills report a seasonable increase in the volume of orders and in shipments, but nothing sufficient to bring about any higher prices. It is evident that the cement trade is in for a spell of bad weather, but it seems improbable that present prices will continue throughout the season. In New York the price is $1.23, which includes the usual charge of 40c. for bags returned. The following quotations were current at the points named, and do not include the usual charge for bags:

Chicago	$1.11	Boston	$1.46
Detroit	1.19	Cleveland	1.16
Jersey City	0.74	Duluth	1.32
New York	0.82	Minneapolis	1.30
St. Paul	1.30	Pittsburgh	1.00

Brick—The market is steady, but with no animation. More brick have been sold so far this year than in the corresponding time last year. Prices are steady at $6 to $6.50 New York for Hudson River Common.

Crushed Stone—Business shows no special activity. Prices are unchanged at 95c. per cu.yd. for 1½-in. stone and $1.05 for ¾-in. stone.

Gravel—Material which will pass the specifications of the Public Service Commission, known as "subway gravel," sells at 95c. to $1. For 1½-in. gravel the price is 80c. For ¾-in. the price is 85c. These prices are for barge lots of 500 cu.yd. delivered alongside of dock New York.

Lime—The market is steady, standard 300-lb. special finishing selling at $1.55 to $1.60. Eastern common sells at $1.15.

IRON AND STEEL

Bluestone—At this season of the year an increase in this line of work usually takes place. However, dealers report that business is better than expected. Bronx flagging sells at 17c. per sq.ft. and Manhattan at 18c. per sq.ft. Curbing prices are steady; 5x16 in. brings 40c. per lin.ft. and 5x20 in. 45c. per lin.ft. Sewer bottoms are held at 25c. per sq.ft. for 5x5 ft. by 3 in.

Pig Iron—The market in pig iron during the past month has been quiet. After the increase of tonnage in April business decreased about one-half. The total sale of foundry iron for May was about 300,000 tons against 550,000 in April. The demand in the Eastern district remained without improvement, and in nearly all sections buying of foundry and steel making iron is confined to small lots. However, it is reported that some basic contracts have been placed in the Pittsburgh district on a basis of $12.50 a ton at Valley furnace. The Southern market remains dull, most of the reported sales being also of small lots. Eastern pipe works have taken some lots of low-grade foundry iron and negotiations are pending for 15,000 tons additional. Prices remain stationary, as producers are confident that a reduction would not induce many orders until conditions change. The departure of Italian workers for the war is causing a shortage of common labor in many quarters of the iron industry. The Connellsville coke district is bound to be affected, and a scarcity of labor is reported from the West Virginia coal fields. Prices in

lots of 100 tons or over at the points named are as follows: Cincinnati, Southern Foundry No. 2, $12.50@12.75; Cincinnati Northern Foundry No. 3, $13.75@14. In New York quotations are as follows: No. 2X Northern Foundry, $14@14.50; No. 2 plain Northern Foundry, $13.75@$14.25; No. 2 Southern Foundry delivered, $13.50@14. Pittsburgh bessemer iron in $14.45 and basin $13.45 including the 95c. freight charges from the Valley to the Pittsburgh District.

Steel Rails—Business has improved and some very good orders placed. These include 25,000 tons for the Southern Pacific, 15,000 tons for the Lake Shore, 15,000 tons for the Chesapeake & Ohio, and 8000 tons for the Chicago & Alton. The Pennsylvania order for 135,000 tons is still hanging fire, but it seems probable that this will be placed within a few weeks. A feature of importance was an order taken by the Colorado Fuel & Iron Co. for a considerable amount for the Russian Government, and negotiations are pending for 100,000 tons of rails for the Trans-Siberian line. The Public Service Commission, New York, will be in the market for rails and both the Manhattan and the Brooklyn elevated lines will have to buy later. Prices for lots of 1000 tons and over are as follows: Standard sections of bessemer, $28; open hearth, $30; both per net ton f.o.b. Pittsburgh. Girder rails in 30-ft. lengths are $36.40 gross ton, and in 60-ft. lengths $38.40 per gross ton, both f.o.b. New York. Other quotations, f.o.b. Pittsburgh, for large lots, the prices being given in cents per pound, as follows: Standard sections, 1.25c.; 20- to 30-lb., 1.15c.; 15- to 20-lb., 1.20c.; 12- to 18-lb., 1.25c.; 8- to 12-lb., 1.30c. For large lots of light rails prices will be considerably shaded.

Track Supplies—The market is much more active than in several months, but rumors of large inquiries from Russia are received with more or less reserve. Standard railroad spikes are quoted at $1.35 to $1.40, and small railroad spikes at $17.45 to $1.50. These are in 100-lb. lots f.o.b. Pittsburgh. In Chicago, track bolts and square nuts are $1.90, and angle bars $1.50. These prices are per 100 lb. Tie plates can be had at the mill at $23.25 and $24.25 per net ton.

Structural Shapes—The prices of structural materials are unchanged compared with last month, but the figure of $1.20 Pittsburgh is more generally adhered to than was the case at that time. While fabricating business is not at all active, it is much better than a month ago, and the report of the Bridge Builders & Structural Society shows that about 63% of the fabricating capacity of the country is now operating. This compares with the low figure reached late last year of 32% of capacity. Prices are unchanged. For I-beams 3 to 15 in., channels 3 to 15 in., angles 3 to 6 in., T's 3 in. and over, $1.20. Other quotations include I-beams over 18 in., H-beams over 18 in., channels over 15 in., angles over 4 in., $1.25. T's, deck beams, and bulb-angles are $1.50, handrail T's $1.95. Cutting to specified lengths is charged at the following rates: 3 ft. to 2 ft. inclusive, 25c.; 2 ft. to 1 ft., 50c.; under 1 ft., $1.55. In Philadelphia the base price is $1.36, in San Francisco $2 to $2.05, New York, $1.37. All of these prices are per 100 lb.

Plates—Shipbuilding work is exceedingly active. Probably every shipyard on the Atlantic Coast has work enough to keep busy for 18 months. Foreign governments are attempting to have ships built here, but so far have been unsuccessful, and practically all the coastwise and ocean lines in the country are endeavoring to get more ships built. It is stated on good authority that it would be impossible to secure delivery promised on any orders placed now inside of 20 to 24 months. This means the most active demand for ship plates that the country has ever had. At the same time, car orders have been fairly large. The Pennsylvania R.R. has given out contracts for nearly 15,000 cars, but will build some of them in its own shops, and other railroads are in the market for a quantity. These have not affected the plate market as much as would be expected, for many of the cars now contracted for are box cars. The prices of plate are unchanged at $1.20 Pittsburgh, equivalent to $1.29 Chicago, $1.36 Philadelphia, $1.37 New York. All these quotations are per 100 lb.

Cast-Iron Pipe—The amount of business has not kept up with the expectations of the foundries, and there is very little tonnage of importance in sight. In Birmingham there is strong hope that freight rates to the Pacific Coast may be sufficiently reduced so they can secure a good share of this business. Prices are slightly higher at Birmingham, 4-in. being quoted at $20, 6-in. and upward at $18. In New York, Class B pipe is quoted $22 to $22.50, Class A pipe $23 to $23.50. In Chicago 4-in. is quoted at $25.50, 6- to 12-in. $23.50, 16-in. and larger $22. Gas pipe is held at one dollar per ton higher on all markets.

Pipe—Prices are somewhat higher. The demand for tubular goods is excellent, one of the manufacturers of pipe operating at 80% of capacity. One company has taken a contract for 50 miles of 8-in. and about 10 miles of smaller pipe.

Discounts are 1% less as follows:

	Black	Galvanized
¾- to 2-in. steel, butt welded	79%	68½%
2½- to 6-in. steel, lap welded	78%	67½%
7- to 12-in. steel, lap welded	76%	65%

At these discounts, the net prices of pipe per foot, in large lots, at Pittsburgh are as follows:

Diameter	Cents Black	Cents Galvanized	Diameter	Cents Black	Cents Galvanized
⅛ in.	2.41	3.62	5 in.	32.56	47.10
1 in.	3.57	5.35	6 in.	42.24	62.40
1¼ in.	4.83	7.24	7 in.	57.12	81.91
1½ in.	5.77	8.66	8 in.	60.00	86.25
2 in.	7.77	11.65	9 in.	82.80	$1.18
2½ in.	12.87	18.91	10 in.	98.88	1.42
3 in.	16.83	24.85	11 in.	$1.11	1.59
4 in.	23.98	35.42	12 in.	1.21	1.74

Sheets—The price of galvanized sheets may have been higher in the early days of the industry, but at no time since they have been so successfully used in such a variety of industries, have prices ever soared to such levels. Some galvanized sheets now command a higher price than tin plate, and it is difficult to see how galvanized sheets can be used to any extent with the present prices of spelter in vogue. Some manufacturers are turning their attention to a lead coating of sheets, an expedient which was tried in the early days and something which may now be successful. But it is needless to say that a lead coated sheet cannot be experimented with and put on the market in time to help very much in the present situation. The demand for black sheets has increased rapidly. No doubt exists but that many manufacturers are using black sheets where the galvanized were heretofore used almost exclusively. The following quotations are for large lots of sheets f.o.b. Pittsburgh, and small lots in store New York:

	Cents per Pound — Large lots Pittsburgh		Warehouse delivery New York	
	Black	*Galv.	Black	*Galv.
No. 10	1.55	2.60	....	....
No. 12	1.55	2.70	....	....
No. 14	1.60	2.70	....	....
No. 16	1.65	2.80	2.35	3.50
Nos. 18 and 20	1.70	2.95	2.40	3.65
Nos. 22 and 24	1.75	3.10	2.45	3.80
No. 26	1.80	3.30	2.50	3.95
No. 27	1.85	3.45	2.55	4.25
No. 28	1.90	3.60	2.60	4.65

*Quotations nominal.

Steel Sheet Piling—Prices continue practically without change at $1.50 to $1.60 per 100 lb. f.o.b. Pittsburgh.

Wire Rope—Business shows some increase, but the demand is not yet up to normal. Discounts are unchanged at 47 and 5% from list for galvanized, and 55 and 5% for bright. At these discounts the net prices of wire rope at the mills are as follows:

Diameter in Inches	Price per Foot — Cast Steel	Crucible Steel	Plow Steel
2½	$0.75	$0.90	$1.07
2¼	0.61	0.73	0.86
2	0.47	0.57	0.67
1¾	0.39	0.49	0.58
1½	0.28	0.34	0.40
1¼	0.20	0.24	0.27
1	0.13	0.15	0.18
¾	0.08	0.09	0.11
⅞	0.06	0.07	0.08

Old Materials—Prices are lower at many points in the country. The decision of Italy to enter the war brings up a new problem; for years this country has been the dumping ground for all the cheaper kinds of scrap. Will more or less now be required? The New York market is dull and prices are as follows:

	Per Gross Ton
Heavy-melting steel scrap	$8.75 to $9.00
Pipes and flues	8.00 to 8.25
No. 1 railroad wrought	10.50 to 10.75
Stove plate	7.75 to 8.00
No. 1 machinery cast	11.50 to 11.75
Wrought turnings	6.00 to 6.25

The Chicago market shows no scrap but railroad offerings are not coming in quite so heavily. The following prices are current:

	Per Gross Ton
Heavy-melting steel scrap	$9.50 to $9.75

	Per Net Ton
No. 1 railroad wrought	$9.00 to $9.50
No. 2 railroad wrought	8.25 to 8.75
No. 1 cast scrap	9.00 to 9.25
Pipes and flues	6.50 to 6.75
Agricultural malleable	7.25 to 7.50
Railroad malleable	8.25 to 8.50

The Pittsburgh market is no firmer but there is a general belief that, with the gradual but constant enlarging of mill operations, prices will improve. There has been no large accumulation and materials are in strong hands.

	Per Gross Ton
Heavy-melting steel scrap	$11.75
Rerolling rails	11.75 to 12.00
No. 1 foundry cast	12.00 to 12.25
Old car wheels	11.75 to 12.00
Machine shop turnings	7.75 to 8.00
Railroad malleable	10.50 to 10.75

Chain—Prices are steady and without change, as follows. These prices are per 100 lb., f.o.b. Pittsburgh:

⅛ in.	$7.50	½ and ⅝ in.	$3.00
¼ in.	4.95	⅝ and ¾ in.	2.90
⅜ in.	3.95	¾ and ⅞ in.	2.80
½ in.	3.40	⅞ and 1 in.	2.70
⅝ in.	3.20	1 to 1¼ in.	2.60
¾ in.			

EXTRAS TO ABOVE LIST PER -00 POUNDS

	For BB	For BBB
⅛-in. and ¼-in.	$1.50	$2.00
⅜-in. and larger	1.25	1.75

Wire—Some of the wire mills, which have orders for war materials, have made new high records. The shipments of barbed wire into Italy have been very heavy for the last two months. The price of spelter has practically taken galvanized wire out of the market. Annealed fence wire sells at $1.35@1.40 and painted barbed wire $1.60, both f.o.b. Pitts-

burgh. Woven wire fencing is quoted at 72% discount for carloads, 71% in 1000 rod lots and 70% for small lots, all f.o.b. Pittsburgh.

Freight Rates—The freight rates on finished steel products from the Pittsburgh district, including plates, structural shapes, merchant steel, bars, pipe fittings, plain and galvanized, wire nails, rivets, spikes, bolts, black sheets (except planished), chain, etc., are as follows, in cents per 100 lb.: Boston, 18.9c.; Buffalo, 11.6c.; Baltimore, 15.4c.; Cleveland, 10.5c.; Cincinnati, 15.8c.; Chicago, 18.9c.; Denver, Colo., 68.6c.; New Orleans, 30c.; New York, 16.9c.; Philadelphia, 15.9c.; St. Louis, 23.6c.; Minnesota and St. Paul, 32.9c.; Pacific Coast (all rail), 80c.

Merchant Steel—Business shows an improvement but stocks in the hands of jobbers are large and in consequence the following quotations may be shaded at times. Prices from jobbers' store in New York are as follows:

	Cents Per Pound
Refined iron:	
1 to 1⅞ in., round and square	1.85
1½ to 4 in. x ¾ to 1 in.	1.85
1½ to 4 in. x ¼ to ⅝ in.	2.05
Norway bars	3.20
Burdens bar iron	3.15
Soft steel:	
¾ to 3 in., round and square	1.85
1 to 6 in. x ⅜ to 1 in.	1.85
1 to 6 in. x ¼ and 5/16	2.00
Rods—⅝ and 11/16 in.	1.95
Bands—1½ to 6x 5/16 in. to No. 8	2.15
Beams and channels—3 to 15 in.	1.90
Angles:	
3 in. x ¼ in. and larger	1.90
3 in. x 5/16 in. and ⅛ in.	2.35
1½ to 2¾ in. x 5/16 in. and thicker	2.00
11½ to 2½ in. x ⅛ in.	2.10
1 to 1¼ in. x 3/16 in.	2.10
1 to 1¼ in. x ⅜ in.	2.15
Tees:	
1½ to 2½x¼ in.	2.05
1½ to 2½x 5/16 in.	2.15
3 in. and larger	1.95

REINFORCING MATERIALS

Bars, Concrete Reinforcing—Business shows an improvement and there is a great deal of activity at the mills due to the manufacturer of larger bars for war materials.

Size	Cents per Pound: Mill Shipments Pittsburgh	*Warehouse Pittsburgh	Delivered from *Warehouse New York
¾-in. and larger	1.20	1.55	2.00 to 2.05
⅝-in.	1.25	1.70	2.05 to 2.10
½-in.	1.40	1.85	2.20 to 2.25
⅜-in.	1.50	1.95	2.30 to 2.35
¼-in.	1.80	2.25	2.65 to 2.70

*Bars from warehouse are cut to desired length without extra charge.

Triangle Mesh—Prices continue steady and there is a fair inquiry:

PRICE PER 100 SQ.FT.

Style No.	Cross Sec. Area per Ft. Width	Plain Material: Carload Lots	Plain Material: Less Than Car Lots and Over 10,000 Sq.Ft.	Galvanized: Carload Lots	Galvanized: Less Than Car Lots and Over 10,000 Sq.Ft.
†4	0.102	$1.00	$1.23	$1.12	$1.34
5	0.077	0.80	0.97	0.89	1.00
6	0.058	0.63	0.77	0.71	0.84
†7	0.041	0.49	0.60	0.55	0.66
†23	0.170	1.69	2.05	1.88	2.24
24	0.142	1.46	1.77	1.62	1.93
25	0.124	1.29	1.57	1.43	1.71
†26	0.110	1.17	1.42	1.30	1.55
†27	0.085	0.96	1.17	1.07	1.28
28	0.066	0.80	0.97	0.89	1.06
29	0.049	0.66	0.80	0.73	0.87
31	0.261	2.49	3.02	2.76	3.29
32	0.225	2.16	2.62	2.40	2.86
33	0.196	1.93	2.34	2.14	2.55
34	0.146	1.48	1.80	1.64	1.96
35	0.109	1.117	1.42	1.30	1.55
36	0.075	0.87	1.05	0.97	1.15
38	0.380	3.55	4.30	3.93	4.68
†39	0.325	3.05	3.70	3.38	4.03
40	0.283	2.68	3.25	2.97	3.54
41	0.208	2.05	2.48	2.27	2.70
42	0.151	1.55	1.88	1.72	2.05
†43	0.101	1.10	1.34	1.23	1.46

METALS

Copper—Prices have about held their own since last month. Production has increased, and, with it, consumption. One of the features of the copper market is that American electrolytic sells in London at about ¾c. per lb. less than is charged to consumers here. Sales have been made in New York for delivery in London at 18c. f.o.b. New York, and resales made at London at 18c. to 18⅛c. f.o.b. New York, are making an impression on the consumers, but a further readjustment and real competition among producers to balance selling prices are probable. During the last of the month domestic manufacturers bought electrolytic from large producers at 18⅞c. delivered 30 days for shipment from June to August, while second hands find it difficult to sell small lots at 18½c. delivered 30 days. Lake copper has sold at 23c. in New York, and inquiries are being made for 1916. Exports since the first of May have been about 29,000 tons.

Tin—The metal has further declined in price since May 1. Large imports have no doubt contributed to the decline, beside which the market has been dull. Far-off positions are weaker, and nearby tin is also easier owing to the small demand. Arrivals for May amount to about 6000 tons. It is interesting to note that some Bauka and Chinese tin is being offered and prompt shipment from Batavia is offered at 35¾c. Spot tin is held at 37½c. with nearby positions at 37c. June delivery at 36¾c., July at 36½c., August and later positions at 36c. Prices are nominal only and under present conditions there is little opportunity for large trade.

Lead—Prices have advanced since last month and its position is strong. In 50-ton lots for shipment from the West the price advanced to 4.50c. Spot in the open market at New York was held at 4.50c. and at East St. Louis 4.42½c.

Spelter—The market has been in more or less of an excited state ever since the beginning of the month. Prices have steadily advanced, and are nominal, owing to the scarcity of spot. The high prices may bring about resales, but first hands have but little to offer. Spot at New York is quoted at 21c. and at East St. Louis, June and July metal is nominal at 20c. No sales are reported of August and September metal.

Old Metals—A fair demand has existed but advanced sharply. Selling prices are approximately:

	Cents per Pound
Copper, heavy cut and crucible	17⅛
Copper, heavy and wire	17
Copper, light and bottom	14⅞
Heavy Machinery composition	13.50
Brass, heavy	12.00
Brass, light	11.00
No. 1 clean brass turnings	13.25
No. 1 composition turnings	12.50
Lead, heavy	3.90
Lead, tea	3.65
Zinc, scrap	14.00 to 16.00

Miscellaneous Metals—Prices of various brass products are higher than ever before. The following quotations are more or less nominal, due to the inability to forecast the market even for a day or so:

	Per Pound
Brass tubes, iron-pipe sizes:	
½ in.	29.00
¾ in. to 3 in.	28.00
3½ in.	28.00
4 in.	29.00
Brass rods	24.00
Brass sheets	24.00
Solder	29.00
Copper tubes	29.00
Zinc sheets	25.00
Copper sheets	25.00
Pig tin (five-ton lots, cash)	38.00
Bismuth	$3.75 to $4.00

CLAY PRODUCTS

Sewer Pipe—As expected, the arrival of warm weather has caused a general improvement in the market. Moreover, there is a decided increase in the amount of sales as compared with the corresponding time last year. Prices remain unchanged, the following discounts being effective: On 3-in. to 24-in. sizes, 80% off list; 27 and 30 in., 70%; 30 and 36 in., 65%. At these discounts, prices are as follows:

PRICE OF SEWER PIPE PER FOOT

Size		Size	
3-in.	$0.05	18-in.	$0.38
4-in.	0.05	20-in.	0.45
5-in.	0.08	22-in.	0.60
6-in.	0.08	24-in.	0.65
8-in.	0.11	27-in.	1.35
10-in.	0.16	30-in.	1.65
12-in.	0.20	33-in.	2.20
15-in.	0.27	36-in.	2.45

Flue Lining—A considerable improvement has been shown during the month, and conditions are very favorable for a large volume of business. However, the discounts remain unchanged at 80% off list. At this rate, prices are unchanged as follows:

FLUE LINING PRICE PER FOOT

Size	Weight in Lb.	Price per Ft.	Size	Weight in Lb.	Price per Ft.
4½x8½-in.	14	$0.07	8½x18-in.	45	$0.18
4½x13-in.	20	0.09	13x13-in.	45	0.17
7½x7½-in.	15	0.08	13x18-in.	57	0.24
8½x8½-in.	18	0.09	18x18-in.	75	0.40
8½x13-in.	28	0.13			

MISCELLANEOUS

Railway Ties—No activity can be reported. Conditions remain about the same as a month ago. Manufacturers look fordward to an improvement during July. First-class standard ties, 7x9 in. by 8 ft. 6 in. are selling at 73c.; 6x8 in. by 8 ft. at 60c. These prices are f.o.b. New York.

Asphaltum—The demand for sheet-asphalt pavements in the last three years has been nothing short of marvelous, prices in the South and Middle West making possible a pavement increasing in popularity, yet low-priced and durable. This is due in a large measure to the great demand for the moderate priced Mexican asphalts, which, since their introduction about three years ago, have practically revolutionized the sheet asphalt paving industry. Prices for the finished pavement in the South and East run from $1.50 to $1.65 per sq.yd. for 1-in. binder and 2-in. top. The price for Mexican paving asphalts for this class of work, has declined to about $13.50 per net ton, f.o.b. refineries, in wooden barrels. Indications are for extensive shipments to the West and South, with prices holding steady.

RAILWAYS

New York.—Jerseyfield Ry.—Plans are being made by this company for the extension of its line for a distance of seven miles, from Salisbury Center, N. Y., to the timber lands. P. D. Mang, Dolgeville, N. Y., is interested.

North Carolina—Atlantic & Western R.R.—This company is making surveys for the extension of its line from Benson to Mt. Olive, N. C. H. P. Edwards, Sanford, N. C., is Supt. and Pur. Agt.

South Carolina—Savannah, Piedmont & Western Ry.—Preliminary surveys have been made by this company for the construction of its proposed railway from Augusta to Greenwood, S. C., about 60 miles. J. Pelton Clark, Engr., 42 Cedar St., New York, N. Y., is interested. Noted Apr. 8.

South Carolina—The Truitt Lumber Co., Norfolk, Va., will extend its railway from Fowler to Nesmith, S. C.

✚**Illinois**—Burlington, Mississippi & Eastern Ry.—According to press reports this company has awarded the contract for the construction of its proposed railway from Apree, Ill., to a point opposite Muscatine, Iowa, to the GULF CENTRAL CANADIAN CONSTRUCTION CO., Minneapolis, Minn. Noted Mar. 4.

Wisconsin—Bayfield & Western Ry.—Acording to press reports plans are being prepared by this company for the extension of its line from Bayfield, Wis., to Herbster, Wis., to connect with the Northern Pacific Ry., making a direct route from Duluth, Minn., to the Bayfield and Cornucopia Districts. H. C. Hale, Bayfield, Wis., is Secy. and Gen. Mgr.

Arkansas—Ingleside & East Arkansas R.R.—This company is being organized for the purpose of constructing a railway from Ingleside to Fisher, Ark. S. B. Richmond, St. Louis, Mo., is interested.

Texas—Henry L. Lindsley, Mayor of Denton, Tex., and associates contemplate the construction of a cut-off railway from Krum to Denton, about seven miles.

Texas—C. O. Williams, Corpus Christi, is interested in the construction of a railway to connect Beeville, Cadiz., Oakville and Three Rivers, Tex., about 25 miles.

Texas—Preliminary arrangements are being made and work will begin about Aug. 1 for the construction of the proposed railway to connect Midland, Andrews, Seminole and Brownville, Tex. W. L. Carwile, Dallas, and T. J. O'Donnell, Midland, are interested. Noted May 13.

Oklahoma—Atchison, Topeka & Santa Fé Ry.—This company has purchased the Oil Belt Terminal Ry., from Jennings to Oilton, Okla., and the Cushing Traction Co., from Cushing to Pemeta, Okla. The company proposes to construct a line from Pemeta to Oilton and a branch from Pemeta to Drumright. F. M. Bisbee, Amarillo, Tex., is Ch. Engr. Western Lines.

Arizona—Tucson, Cornella & Gila R.R.—Bids will be received until June 10 by John C. Greenway, Warren, Ariz., Gen. Mgr., for the construction of 38 miles of this company's proposed line from Gila Bend to a point near Ajo. R. H. Jones, Gila Bend, is Ch. Engr. Noted May 27.

Oregon—Spokane, Portland & Seattle Ry.—Plans are being considered by this company for the construction of two miles of spur track for its yards at Bend, Ore., across the Des Chutes River. A. M. Lupfer, Portland, is Ch. Engr.

ELECTRIC RAILWAYS

Springfield, Mass.—The Springfield St. Ry. Co. is considering the petition of the Van Horn Citizens Club for an extension of its line from Chestnut and Carew St., through Carew St. to connect with the present tracks on Page Blvd. R. G. Tyler is Ch. Engr.

Middletown, Conn.—The Middletown & Chester Ry. Co. has been incorporated to construct an electric railway from Middletown to Chester. The incorporators are: Richard H. Bunce, Gustaf B. Carlson, Isaac Spear, Randolph S. Lyon, George Burnham, Eben Jackson, Dale D. Butler, Middletown, and Robert W. Perkins, Norwich. Noted Dec. 24.

New York, N. Y.—(Borough of Queens)—The Manhattan & Queens Traction Corporation contemplates the construction of a loop from Queens Blvd. along Van Dam St. to Review Ave., along Review Ave. to Laurel Hill Blvd. to Packard St. and back to Queens Blvd., Long Island City. S. B. Severson, Queens Plaza Court, Long Island City, is Pur. Agt. and Gen. Mgr.

Port Jervis, N. Y.—The Port Jervis Traction Co. is preparing plans to extend its line to Milford, Penn. W. E. Guthrie, Port Jervis, is Gen. Mgr.

Syracuse, N. Y.—The New York State Rys. Co. will spend $75,000 for the improvement of its line on East Genesee St. P. J. Honold, Syracuse, is Pur. Agt.

Koppel, Penn.—The Pittsburgh, Harmony, Butler & New Castle Ry. Co. has completed surveys for the construction of its proposed extension from Koppel to New Galilee. The line will connect with the Pittsburgh, Lisbon & Western R.R., a steam road extending from New Galilee through Darlington to Lisbon, Ohio, which will be purchased by the Pittsburgh, Harmony, Butler & New Castle R.R. and converted into an electric line.

Lynchburg, Va.—The Lynchburg Traction & Light Co. has applied to the City Council for a franchise to extend its line from the Fair Grounds to Ft. Hill. J. W. Hancock, Lynchburg, is Gen. Mgr. and Pur. Agt.

Parkersburg, W. Va.—Preliminary arrangements are being made by the Charleston, Parkersburg & Northern Ry. Co. for the construction of its proposed electric railway from Parkersburg to Charleston, about 74 miles. K. B. Stephenson is interested. Noted Sept. 24.

✚**Lulu, Ga.**—(Official)—The Lulu-Homer R.R. Co. has awarded the contract for the construction of its railway from Lulu to Homer, to WILLIAM J. REDMOND, Atlanta, Ga. Noted Jan. 21.

Bristol, Tenn.—Surveys have completed and contracts will soon be awarded for the construction of an electric railway from Newport to Kingsport and Bristol. LeRoy Park, Bristol, is interested.

Cleveland, Ohio—The Cleveland Ry. Co. has applied to the City Council for a franchise to construct a three-mile extension to its 25th St. line on State Rd. Charles H. Stanley is Pur. Agt. Noted May 27.

Gary, Ind.—The Gary, Hobart & Eastern Ry. Co. is considering plans for the extension of its tracks in Gary from Broadway east to Virginia St. and north to the mill gates. B. J. Schramm, Hobart, is Gen. Supt. and Pur. Agt.

Muskegon, Mich.—The Muskegon, Casnovia & Saginaw Interurban Ry. Co. has completed surveys for the construction of its proposed line from Crystal Lake to Muskegon, about 80 miles. C. S. Gamble, Muskegon, is Engr. Noted Apr. 29.

Milwaukee, Wis.—The Milwaukee Western Electric Co. has completed surveys for the extension of its line to Merton. W. D. Chapman, Steger Bldg., Chicago, Ill., is Gen. Mgr.

Cedar Rapids, Iowa—The City Council has granted a franchise to the Iowa Ry. & Light Co. to construct additional tracks on Fourth Ave. from Second to Third St. William G. Dows is Gen. Mgr. Noted May 27.

Iowa City, Iowa—The Iowa City-Muscatine Interurban Ry. Co. has completed surveys for the construction of its proposed electric railway from Iowa City to Muscatine and West Liberty. A. L. Bowen, Muscatine, is interested. Noted Apr. 29.

Abilene, Tex.—The Abilene Gas & Electric Co. is preparing to extend its lines to Clyde, Putnam, Baird and Cisco.

Houston, Tex.—Franklin Watson and W. N. Vinton, Columbus, Ohio, have taken over the holdings of the Beaumont-Houston Interurban Ry. Co. The new owners have applied for a charter and will organize a company to construct the line. Noted Jan. 21.

Marfa, Tex.—Preliminary arrangements are being made and contracts will soon be awarded for the construction of the proposed railway from Marfa to Ft. Davis, Tex., about 18 miles. B. T. Musgraves, Ft. Davis, is Pres. and H. A. Hardaway, Deming, N. M., is Ch. Engr. Noted Apr 15

Salem, Ore.—The Willamette Valley Southern Ry. Co. is preparing plans for the extension of its line from Salem to Mt. Angel. F. W. Hild, Portland, is Gen. Mgr. Noted May 6.

Suisun City, Calif.—The Northern Electric Co. plans to construct a seven-mile line from Suisun City to Oakland. W. A. McGovern, Chico, is Gen. Mgr.

LIGHT, HEAT AND POWER

Reading, Mass.—Bids will be received until June 5 by the Municipal Light Board for constructing extensions to the present distribution system of the municipal lighting system. George L. Flint, 179 Main St., is Secy. of the Bd. Noted May 13.

Worcester, Mass.—The Worcester Electric Light Co. has decided to build an addition to its Webster St. station at an estimated cost of $160,000. The plans provide for a one-story 80x104-ft. building and a 175-ft. chimney. Space will be provided for eight boilers, but only two will be installed at present, of 1050 hp. each. They will be equipped with mechanical stokers. A hot-water heater will also be installed. R. W. Rollins is Pres. and Mgr.

Worcester, Mass.—The City Council has authorized an appropriation of $8000 for improving and enlarging the power plant of the City Hospital.

Rochester, N. Y.—The Vacuum Oil Works, Rochester, has applied for a permit to build a one-story power house at 904 Exchange St. The estimated cost is $4000.

Newark, N. J.—It is reported that the Central Dyestuff & Chemical Co. contemplates the construction of a power plant in connection with its plant on Plum Point Lane. M. N. Shoemaker is Engr.

✚**Perth Amboy, N. J.**—The Board of Aldermen has awarded the contract for the construction of a municipal electric-light plant to the WATSON-FLAGG ENGINEERING CO., 27 Thames St., New York, N. Y., at $122,082. Noted Mar. 25 and Apr. 22.

West Hoboken, N. J.—(Official)—Bids will be received until June 9 by August L. Wachlin, Town Clk., for lighting the streets and public places of the town.

✚**St. Clair, Penn.**—The Borough Council has awarded the contract for extensions and improvements to the municipal electric-light plant to the HAZLETON MACHINERY & SUPPLY CO., 242 West Broad St., Hazleton. Noted May 27.

Indian Head, Md.—See item under "Federal Government Work."

Plymouth, N. C.—At a recent election, the citizens defeated a bond issue of $12,000, which was to have been used for the installation of a municipal electric-light plant. Noted Apr. 29.

Winder, Ga.—It is reported that the city will replace its present steam generating system with electric power. Energy will be purchased from the Georgia Ry. & Power Co., Atlanta, which will extend its transmission line from Gainesville to Winder. J. T. Strange is Chn. of Bd. of Water & Light Comrs., Winder.

Whitecastle, La.—See item under "Water Supply—Irrigation."

Crossville, Tenn.—It is reported that E. B. Jones and John E. Green are interested in the establishment of an electric-light plant at Crossville.

Nashville, Tenn.—The State Senate has passed a bill authorizing an appropriation of $7000 for the purpose of building a transmission line from the power plant at the State Penitentiary to the State Capitol building to light the latter building.

Harlan, Ky.—The Harlan Commercial Club is reported to be interested in a $250,000 electric power plant to be built at Harlan by an association of Cincinnati capitalists.

Richmond, Ky.—The Dicks River Power Co., which was organized some time ago to build a hydro-electric plant in central Kentucky, will soon begin work, according to press reports. L. B. Herrington, Richmond, is Pres.

Canton, Ohio—It is reported that the Canton Electric Co. has purchased a site on which to build an addition to its power station. The company has authorized improvements to its system to cost about $250,000. W. C. Anderson, Canton, is Mgr. and Supt.

Marietta, Ohio—The City Council has vetoed the ordinance to purchase electricity for the operation of the municipal electric-lighting system from the Parkersburg, Marietta & Interurban Ry. Co. The Building Committee of the Council has been authorized to select a site for a power station, and the Light Committee will secure estimates of the cost of equipping a new municipal electric plant.

Painesville, Ohio—A special election will be held June 22 to vote on the question of issuing $35,000 in bonds, the proceeds of which will be used for improving the municipal electric-lighting system. Noted May 6.

✚Bremen, Ind.—The Town Council has decided to abandon the municipal electric-light plant, and has awarded a 10-year contract for lighting the town to the HAWKS ELECTRIC CO., Goshen, Ind. The latter company will build a 12-mile transmission line to Bremen.

Whitestown, Ind.—Bids will be received until 1 p.m., June 12, by Walter Schooler, Bd. of School Trustees of Worth Township, for the installation of heating, ventilating and plumbing equipment in the high school building of Worth Township.

Salt Lake City, Utah—It is reported that the Utah Power & Light Co. plans to spend about $1,000,000 in extending and rebuilding its present lines. A new street-lighting system will be installed in Salt Lake City.

✚Seattle, Wash.—The Board of Public Works has awarded the contract for the installation of an additional boiler at the Lake Union auxiliary steam plant of the municipal electric-light plant to CHARLES C. MOORE & CO., San Francisco, Calif., at $18,175. Noted Apr. 1.

Hull, Que.—Bids will be received until 4 p.m., June 7, by H. Boulay, City Clk., for powerhouse equipment, to include a 1200-hp. water wheel and water wheel governor, one set double helical gears, 600-kw. electric generators and a centrifugal pump. J. P. Albert Leforest is City Engr.

BRIDGES

Milford, Conn.—It is reported that the Board of Selectmen and the Connecticut Co., New Haven, contemplate the construction of a reinforced-concrete bridge across the Wepowaug River. The estimated cost is $16,000. Alonzo W. Buins is First Selectman of Milford. W. R. Dunham, Jr., New Haven, is Engr. of the Connecticut Co.

Bryson City, N. Y.—(Official)—Bids will be received until 1 p.m., June 7, by the "Swain Highway Commission," Bryson City, for the construction of a 300-ft. bridge across the Tuckasegee River. Bids will be accepted for either a steel or concrete structure. T. M. Howerton is Engr.

Watertown, N. Y.—(Official)—Bids will be received until noon, June 15, by Henry J. Snook, City Treas., for the purchase of $107,500 in bridge bonds.

Brielle, N. J.—(Official)—Bids will be received until 11 a.m., June 9, by J. M. Corlies, Dir., Bd. of Chosen Freeholders of Monmouth County, Freehold, for the construction of a bridge over an arm of the Manasquan River in Wall Township, known as the Brielle Bridge. George D. Cooper, 60 Broad St., Red Bank, is County Engr. Noted May 13.

Elizabeth, N. J.—It is reported that the Board of Chosen Freeholders of Union County has approved plans for a new concrete arch at Union Ave. The estimated cost is $12,000. Jacob L. Bauer is County Engr.

Hackensack, N. J.—(Official)—Bids will be received until 2 p.m., June 4, by the Board of Chosen Freeholders of Bergen County for constructing the following bridges: North Irving St., Ridgewood; Ramapo Ave., Mahwah; Martha St. and East 54th St., both in Saddle River Township; Latchman's Bridge, Riverdale Township; Tappan Rd., Borough of Harrington Park; Washington Pl., Englewood; replanking the Anderson St. Bridge, Hackensack. Harry A. Shuart is Clk., Bd. of Freeholders. Ralph D. Earle, Jr., is County Engr.

Kearney, N. J.—It is reported that the Delaware, Lackawanna & Western R.R. will build a viaduct at Sandford's Crossing for the elevation of its tracks over the Newark Turnpike.

Coopersburg, Penn.—It is reported that bids will be asked in July by the Commissioners of Lehigh County, Allentown, for the construction of a concrete bridge at Coopersburg. The estimated cost is $4000. Robert Rathburn, Hunsicker Bldg., Allentown, is Engr.

✚Indiana, Penn.—(Official)—The Board of Commissioners of Indiana County has awarded the contract for the construction of two bridges to the CURWENSVILLE CONSTRUCTION CO., Curwensville, at $4493. Bids will be received until noon, June 10, for the construction of a county bridge. Thomas Pealer, Indiana, is County Engr.

✚Phoenixville, Penn.—The commissioners of Montgomery and Chester Counties have awarded the contract for a temporary bridge across the Schuylkill River between Phoenixville and Mont Clare to the BENDER CONSTRUCTION CO., Phoenixville, at $7448. This structure will replace the old bridge which was totally destroyed by fire recently. Noted May 20 under Mont Clare, Penn.

West Chester, Penn.—(Official)—Bids will be received until June 7 by the Board of Commissioners of Chester County for the construction of five bridges: One stone arch over Buck Run in Newlin Township; four concrete and I-beam bridges, one each in Penn Township, Lower Oxford Township, West Nottingham Township and New Garden Township. Isaac Y. Ash is County Controller.

Clarksville, Va.—Bids will be received until noon, June 10, by R. H. Easley, Mayor, for reflooring and repairing the Clarksville Toll Bridge.

Luray, Va.—(Official)—Bids will be received until noon, June 10, by the Clerk of the Circuit Court of Page County for the construction of a 105-ft. bridge over Hawksbill Creek about one mile from Luray. Alteranate bids will be received for a reinforced-concrete or steel structure. G. P. Coleman, Richmond, is State Highway Comr.

✚Washington, Va.—(Official)—The Board of Commissioners of Rappahannock County has awarded the contract for a bridge across the Rappahannock River between Rappahannock and Fauquier Counties to E. M. McCOMB, Manassas. Noted May 13.

Chattanooga, Tenn.—The State Legislature has authorized Hamilton County to build an additional bridge across the Tennessee River at an estimated cost of $100,000.

✚Henderson, Ky.—(Official)—The Fiscal Court of Henderson County has awarded the contract for the construction of 10 reinforced-concrete bridges to H. H. LILLY, Smith Mills, at a total of $5505. Contracts for one bridge each were awarded to the CHAMPION BRIDGE CO., Wilmington, Ohio, and the INTERNTAIONAL STEEL & IRON CO., Evansville, Ind. Noted Apr. 22 and May 20.

Paducah, Ky.—It is reported that the Chicago, Burlington & Quincy R.R. Co. will soon begin the construction of a bridge across the Ohio River near Paducah. The estimated cost is $4,000,000. C. H. Cartlidge, Chicago, is Bridge Engr.

Ashland, Ohio—(Official)—Bids will be received until noon, June 14, by the Board of Commissioners of Ashland County for the construction or repair of seven county bridges. D. F. Hay is Chn. of Comrs. H. C. Westover is County Audr.

Cincinnati, Ohio—(Official)—Bids will be received until noon, June 8, by Philip Fosdick, Dir. of Pub. Ser., for rebuilding and repairing Bridges Nos. 1 and 2 on Crawford Ave., over Ludlow Run. Parke S. Johnson is Secy. of the Bd.

McArthur, Ohio—Bids will be received until noon, June 8, by the Board of Commissioners of Vinton County for the construction of a steel bridge on the McArthur-Athens Rd. C. W. Brown is County Audr.

Sidney, Ohio—Bids will be received until 10 a.m., June 15, by George P. Staley, Audr. of Shelby County, for the construction of a concrete arch over Panther Run Creek in Cynthiana Township.

✚East Gary, Ind.—The Board of Commissioners of Lake County, Crown Point, has awarded the contract for a steel bridge of three 53-ft. spans on concrete abutments, across the Deep River at East Gary to E. H. CROWELL, Crown Point, at $12,924. Noted Jan. 28.

Franklin, Ind.—Bids will be received until 2 p.m., June 7, by the Board of Commissioners of Johnson County for a bridge in Hensley Township. H. L. Knox is County Audr.

La Fayette, Ind.—No bids were received recently by the Commissioners of Tippecanoe County for the construction of a reinforced-concrete bridge at Sycamore Crossing. The estimated cost was $4000. The project has been held in abeyance, and an additional appropriation will probably be asked for the structure. G. W. Baxter is County Audr.

Richmond, Ind.—(Official)—Bids will be received until 11 a.m., June 12, by the Commissioners of Mayne County for the construction of the Ellis Culvert. It will be of reinforced concrete. L. S. Bowman is County Audr.

Benton Harbor, Mich.—The City Council has called a special election for June 7 to vote on the question of issuing $28,000 in bonds for the purpose of building a concrete arch over Ox Creek, connecting High St. and East High St. C. R. Wightman is City Engr.

Concord, Mich.—It is reported that the Mayor and City Council have authorized the issue of $86,000 in bonds, the proceeds of which will be used for building new bridges at Main and Pembroke St.

✚Spring Lake, Mich.—The contract for constructing two bridges in Spring Lake Township across Curtis and Smith Bayous, has been awarded to HOWARD GARDNER, Spring Lake, at $9300.

Mt. Sterling, Ill.—(Official)—Bids will be received until 1 p.m., June 12, by W. O. Grover, County Supt. of Highways of Brown County, for the construction of either a reinforced-concrete or steel bridge in Pea Ridge Township. It will be a 60-ft. span with 18-ft. roadway.

✚Allison, Iowa—The Board of Supervisors of Butler County has awarded the contract for a number of county bridges to the MILLER-HEY CONSTRUCTION CO., Waterloo, at $18,608.

Council Bluffs, Iowa—It is reported that bids will be asked about June 18 by the Supervisors of Pottawattomie County for the construction of a steel bridge to cost about $20,000. It will have two 60-ft. and one 40-ft. pony trusses with I-beam approaches of 20 and 24 ft. J. D. Hannan is County Audr. H. M. Howard is Engr.

Red Lake Falls, Minn.—Bids will be received until 1:30 p.m., June 11, by George Dupont, Audr. of Red Lake County, for the construction of three reinforced-concrete bridges and four culverts.

Beloit, Kan.—Bids will be received until noon, June 9, by the Board of Commissioners of Mitchell County, C. M. Seidel, Chn., for the construction of Bridges Nos. 810.201 and 86,141. T. H. McCall is County Clk.

Lincoln, Kan.—Bids will be received until noon, June 7, by C. E. Booze, County Clk. of Lincoln County, for the construction of two bridges.

✚Nebraska City, Neb.—(Official)—The Board of Commissioners of Otoe County has awarded the contract for the construction of five bridges during the year to the WILSON REINFORCED CONCRETE CO., Nebraska City. C. A. Shannon is County Engr. Noted Apr. 24.

✚North Platte, Neb.—(Official)—The Commissioners of Lincoln County have awarded the contract for the construction of a 700-ft. bridge over the North Platte River, two miles east of the Town of North Platte, to the OMAHA STRUCTURAL STEEL WORKS, Omaha, at $29,250. Noted Apr. 15 and 29.

O'Neill, Neb.—The Commissioners of Holt County, O'Neill, and Boyd County, Butte, and the State Highway Department will build a 175-ft. steel bridge across the Niobrara River connecting the two counties. It will replace a bridge recently washed away. The estimated cost is $10,000. D. D. Price, Lincoln, is State Highway Engr.

Cody, Wyo.—Press reports state that Park County contemplates building three steel bridges on the Cody Rd., at an estimated cost of $5500 each.

Joplin, Mo.—At a recent special election the citizens defeated a bond issue of $13,500 for the construction of a viaduct on North Main St. J. B. Hodgdon is Comr. of Streets. Noted Feb. 25.

Macon, Mo.—Bids will be received until 2 p.m., June 9, by the Macon County Court for the construction of six county bridges, ranging from 24 ft. to 50 ft. in length.

✚**Oregon, Mo.**—(Official)—The Board of Commissioners of Holt County has awarded the contract for the construction of five steel bridges and 16 concrete culverts to the MISSOURI BRIDGE & IRON CO., St. Louis. Five other bids were received. Noted May 13.

✚**Platte City, Mo.**—The County Court of Platte County has awarded contracts to the TOPEKA BRIDGE & IRON CO., Topeka, for constructing the following bridges: Bridge over Cottonwood Rd., $4625; over Muddy Creek on the San Antonio Rd., $3900, and over the Little Neuralgia on the Union Rd., $3830. Contracts for 10 small bridges, aggregating $6160, and the repair of eight bridges, at a total of $2557, were awarded to various local contractors. Ray Cargill is County Highway Engr.

Laredo, Tex.—Bids will be received until 10 a.m., June 15, by J. S. Westbrook, Chn., St. and Bridge Com., for the construction of two reinforced-concrete bridges across Zacate and Chacon Creeks.

Kingfisher, Okla.—Bids will be asked shortly by the Commissioner of Kingfisher County for the construction of 16 steel and reinforced-concrete bridges, from 24 to 100 ft. long, with concrete abutments. W. G. Newer is County Clk. C. R. Steele is Engr.

✚**Idaho City, Idaho**—The Commissioners of Boise County have awarded contracts for two bridges, one across the North Fork of the Payette River on the road between Garden Valley and Banks, and the other across Clear Creek at Alpha, to the MISSOURI VALLEY BRIDGE & IRON CO., Denver, Colo., at $6800 and $2000 respectively.

Eugene, Ore.—H. W. Libby, County Engr. of Lane County, has prepared plans for the Coast Fork Bridge, to be built at an estimated cost of $11,000. A pile bridge, costing about $3000, is planned for the Suislaw River.

Mayfield, Wash.—(Official)—Bids will be received until 2 p.m., June 14, by the State Highway Commission, Olympia, for the construction of a 468-ft. cantilever steel bridge across the Cowlitz River at Mayfield. It will require about 190 tons of steel and 615 cu.yd. of concrete. Noted Jan. 28.

✚**Colusa, Calif.**—The Board of Supervisors of Colusa County has awarded the contract for the construction of several concrete bridges near Colusa to PETER GRASER, Williams, at about $10,000.

★**Needles, Calif.**—(Official)—Bids will be received until 2 p.m., June 19, by the Commissioner of Indian Affairs, Washington, D. C., for the construction of a steel highway bridge across the Colorado River at Topock, Ariz., near Needles, between the states of Arizona and California. The bridge will be 832 ft. long and the main span shall consist of a three-hinged arch of 592 ft. Plans and specifications on file at the office of "Engineering News," 10th Ave. at 36th St., New York. E. B. Merritt is Asst. Comr. of Indian Affairs. Noted Mar. 18 and Apr. 15.

Nevada City, Calif.—The Board of Supervisors of Nevada County plans to construct two new concrete bridges at Nevada City; one across Little Deer Creek and the other across Gold Run Ravine.

✚**San José, Calif.**—The Board of Supervisors of Santa Clara County has awarded a contract for the construction of a concrete bridge over Los Gatos Creek, near Los Gatos, to JOHN W. WILLIAMS, San José, at $5280. Noted May 13.

Ottawa, Ont.—Bids will be received until June 8 by J. W. Pugsley, Secy., Dept. of Rys. and Canals, Ottawa, for the construction of eight bridges on the main route of the Intercolonial Ry.

Vancouver, B. C.—The City Engineering Department is preparing plans and estimates of the cost of rebuilding the Connaught Bridge which was recently destroyed by fire.

WATER SUPPLY—IRRIGATION

Middleton, Mass.—(Official)—Bids will be received until June 5 by B. T. McGlanfein, Chn. Water Comn., for making extensions to the water system. The estimated cost is $7500. Noted Mar. 25.

★**Salem, Mass.**—(Official)—Bids will be received until 10 a.m., June 21, by the Director of Public Service, for installing two 10,000,000-gal. steam pumps. George F. Ashton is City Engr.

✚**Salem, Mass.**—The contract has been awarded to A. G. TOMASELLO, Boston, at $68,455, for constructing a concrete reservoir. Noted May 13 and 27.

Worcester, Mass.—An appropriation of $80,000 has been made by the City Council for construction work on the Asnebumskit water supply system at Pine Hill reservoir. Noted Apr. 22.

★**Binghamton, N. Y.**—Bids were received for the construction of a 10,000,000-gal. high-pressure pumping engine as follows: William Todd Co., $41,365, for a pump with condenser discharge; William Todd Co., $40,865, for a pump with condenser and suction; Snow Steam Pump Works, $27,240; Allis-Chalmers Mfg. Co., $29,220, and the Hamilton Corliss Engine Works, $26,000. Noted Apr. 1.

Oswego, N. Y.—A special election will be held in June to vote on the question of issuing $35,000 in bonds, the proceeds of which will be used for the extension and repair of the water system.

Wellsville, N. Y.—Bids will be received about July 1 for constructing a water system, the estimated cost of which is $104,000. C. C. Hopkins, Cutler Bldg., Rochester, is Engr. Noted Mar. 18.

✚**East Orange, N. J.**—The contract has been awarded by the Water Board to the REEVES-CUBBERLY ENGINE Co. Trenton, for furnishing two vertical cross-compound engines to be directly connected to centrifugal pumps of 4,000,000 gal. capacity each. Noted Apr. 8.

Perth Amboy, N. J.—The Board of Water Commissioners has authorized the extension of the water mains in Carson, Hommann, Pulaski Ave. and in Colfax St. Thomas Grieve is Supt. of Water-Wks.

Bethlehem, Penn.—(Official)—The city has had plans approved by the State Department of Health for drilling wells for the water system.

Canton, Penn.—(Official)—The Citizens Water Co. has had preliminary plans approved by the State Department of Health for the construction of filters and for remodeling the distributing system.

Glenlron, Penn.—A water system will be installed at the Pennsylvania Home for Feebleminded Women. George S. Idell, Philadelphia, is Arch.

Gratz, Penn.—(Official)—The State Department of Health has approved preliminary plans of the Gratz Water Co. for the construction of a pumping station, a reservoir and pipe lines.

Hegins, Penn.—(Official)—Preliminary plans of the Hegins Water Co. for the construction of a reinforced-concrete reservoir have been approved by the State Department of Health.

Houtzdale, Penn.—(Official)—Extensions will be made to the distributing system of the Ramey Water Co. Plans have been approved by the State Department of Health.

Madera, Penn.—(Official)—The Madera Water Co. will make extensions to its distributing system, plans for which have been approved by the State Department of Health.

New Wilmington, Penn.—(Official)—Alterations to the storage reservoir, for which plans have been approved by the State Department of Health, will be made by the New Wilmington Water Supply Co. Noted Dec. 10, 1914.

Norristown, Penn.—(Official)—The Norristown Insurance & Water Co. will install rapid sand filters at its water-works. The State Department of Health has approved plans.

Portage, Penn.—(Official)—The Portage Water Co. will enlarge its storage reservoir. Plans have been approved by the State Department of Health.

Reading, Penn.—(Official)—The Reading Suburban Water Co. will install slow sand filters, plans for which have been approved by the State Department of Health.

Saltsburg, Penn.—(Official)—The Borough will soon be in the market for a 5900,000-gal. to 750,000-gal. pump of either high-pressure duplex or steam turbine driven centrifugal type for the water-works. Robert H. Wilson, Saltsburg, is Chn. of Water Com.

Schuylkill Haven, Penn.—The Schuylkill Haven Service Commission to make extensions and improvements to its water system.

Scottdale, Penn.—(Official)—Plans have been approved by the State Department of Health for gravity supply mains for the Citizens Water Co.

Shamokin, Penn.—(Official)—The State Department of Health has approved the plans of the Bear Gap Water Co. for the construction of a storage reservoir.

Myersville, Md.—(Official)—The city contemplates constructing a gravity water system. Tobert B. Morse, Baltimore, is Ch. Engr. Dept. of Health. Noted Sept. 17, 1914

✚**Petersburg, Va.**—The contract has been awarded to the PITTSBURGH-DES MOINES STEEL CO., Pittsburgh, Penn., at $4475, by the Water Commissioners for two 60,000-gal. water tanks. Noted May 13.

Keyser, W. Va.—The citizens contemplate holding an election to vote on the question of issuing bonds, the proceeds of which will be used for the construction of a water system. Leander Schaidt, Citizens' Bank Bldg., Cumberland, Md., is making surveys.

Gastonia, N. C.—According to press reports the city has sold bonds for $99,000, part of the proceeds of which will be used for the extension of the water system. T. A. Ratchford is City Clk.

Warrenton, N. C.—Bonds for $50,000 have been voted by the citizens, part of the proceeds will be used for the construction of a water system. Gilbert C. White, Charlotte, is Engr. Noted Mar. 18 and Apr. 29.

✚**Wilmington, N. C.**—The contract has been awarded to A. D. O'BRIEN, Wilmington, at $4126, for installing a water system in the Oakdale cemetery. Noted May 13.

Wilson, N. C.—An election will be held July 6 to vote on the question of issuing $250,000 in bonds, the proceeds of which will be used for the reconstruction of the water-works and for building a gas plant and paving. Noted Feb. 25.

Ft. Meade, Fla.—Bids will be received until June 15 for the purchase of $58,000 in bonds, part of the proceeds of which will be used for the extension of the water system. J. J. Singleton is Secy. Bd. of Bond Trust. Noted Sept. 10 and May 20.

Greenville, Fla.—The city will install a water system. Fred A. Bishop is Engr.

Dadeville, Ala.—Bonds for $16,000 have been voted by the citizens, the proceeds of which will be used for the installation of a water system. Noted Mar. 25.

White Castle, La.—The city voted in favor of installing water and electric-light systems. The estimated cost is $25,000. Xavier A. Kramer, Magnolia, Miss., is Engr. Noted Apr. 22.

Tomkinsville, Ky.—The construction of a water system is under consideration. L. W. Preston, Glasgow, is interested.

East Liverpool, Ohio—(Official)—Bonds for $200,000 have been sold, the proceeds of which will be used for the extension of the water system. J. A. Kenney is Audr. Noted Mar. 4 and May 6.

Euclid, Ohio—Bids will be received until noon, June 28, by H. S. Dunlop, Clk., for laying a 6-in. water main in Cut Rd., from Lake Rd. to Lake Erie.

South Charleston, Ohio—Bonds for $30,000 have been voted by the citizens, the proceeds of which will be used for the construction of a municipal water system.

Milton, Ind.—The Connersville Water Co. has received a franchise from the Town Board and according to press reports, will construct water and electric-light systems.

South Lyon, Mich.—The city has retained Rossback & McKee, Ft. Wayne, Ind., to prepare plans for the construction of a municipal water system.

✚Carlyle, Ill.—The contract has been awarded to MONIE & DUNBAR, St. Louis, Mo., for furnishing a pump and for making extensions to the water system. Noted Apr. 22 and May 13.

Eureka, Ill.—Bonds for $17,000 have been voted by the citizens, the proceeds of which will be used for the extension of the water system. A. S. V. Baird is City Clk. Noted Apr. 15.

✚Peoria Heights, Ill.—The contract has been awarded to W. G. HOY, Woodstock, at $47,000, for laying water mains. Noted Dec. 24 and Mar. 18.

Sparta, Ill.—Bids will soon be received for the construction of water and sewer systems, the estimated cost of which is $60,000. W. McK. Brown, Cohakia Bldg., East St. Louis, is Engr. Noted Dec. 3 and 10, and Mar. 18.

Springfield, Ill.—The Council contemplates purchasing 475 tons of water pipe from the Lynchburg Foundry Co.

Fennimore, Wis.—Bids will be received until June 7 by H. B. Lewis, Village Clk., for furnishing and installing one deep well power pump head, motor, controller, one electrically operated outside guide and packed power pump, motor and control, one electrical centrifugal fire pump, motor and control and pipe, fittings and valves.

Milwaukee, Wis.—Bids will be received until 8 p.m., June 7, by A. F. Schwann, Village Clk., North Milwaukee, for constructing 5700 ft. of 12-in. water main in Cedarburg Plank Rd. and 1003 ft. of 8-in. main in Hampton Ave.

✚Milwaukee, Wis.—The contract has been awarded by the Board of Park Commissioners to ARTHUR H. VOGEL, Milwaukee, at $17,690, for constructing about 100 ft. of rock-filled timber crib at the new Linnwood Ave. water-works intake.

Sallx, Iowa—(Official)—Bids will be received after Aug. 1 for the construction of a water system. The estimated cost is $10,000. H. S. Bruce, Yankton, S. D., is Engr.

Campbell, Minn.—(Official)—Bids will be received until 7:30 p.m., June 15, by Herman Reyelts, Village Recdr., for constructing a water system. Plans are on file with J. F. Druar, Engr., Commercial Bldg., St. Paul. Noted May 20.

St. Paul, Minn.—(Official)—The date has not yet been set when bids will be received for the improvement of the water system. Allen Hazen, New York, N. Y., is Engr. and Garrett O. House, St. Paul, is Supt. of Water Wks. Noted May 20.

Canova, S. D.—(Official)—Bids will be received until 8 p.m., June 18, by H. H. Schulte, Town Clk., for the purchase of $9500 in bonds, the proceeds of which will be used for the construction of a water system. Noted May 20.

Edgemont, S. D.—Bonds for $30,000 have been voted by the citizens, the proceeds of which will be used for the improvement of the water system.

Irene, S. D.—(Official)—The low bidder for constructing a water system was W. L. Bruce, Yankton, at $11,110.

Cody, Wyo.—According to press reports, the Billings Engineering Co., Billings, has been retained by the City Council to prepare plans for the construction of a municipal water system and electric-light plant. B. W. Bennett is City Clk. Noted Jan. 2, 1913.

Chouteau, Mont.—The town contemplates constructing a water system, the estimated cost of which is $42,000. Swearingen & McCulloh, Chouteau, is Engr. Noted May 6.

✚★Lewistown, Mont.—(Official)—The contract has been awarded to the HESS FLUME CO., Denver, Colo., at about $5000, by the Winnett Irrigation Co., for constructing metal flumes. E. H. Holmboe is Secy. Noted Apr. 15.

Wibaux, Mont.—An election will be held July 1 to vote on the question of issuing bonds, the proceeds of which will be used for the construction of a water system. Noted May 13.

Argenta, Ark.—The Council favors purchasing the plant of the Arkansas Water Co. at an estimated cost of $400,000.

Kansas City, Mo.—The Council contemplates rejecting bids received for furnishing a motor-driven centrifugal pump for the Turkey Creek pumping station. Noted Apr. 22.

Harrison, Ark.—Bids will be received until June 25 by George W. O'Neal, City Secy., for the construction of a water system. The estimated cost is $25,000. M. A. Earl & Co., Flynn-Ames Bldg., Muskogee, Okla., is Engr. Noted Nov. 5, Jan. 14 and Apr. 22.

✚Beaumont, Tex.—The contract has been awarded to the LAKE ARTHUR DREDGING CO., Lake Arthur, La., at $21,775, by the city for the extension of the water-works canal. Burns & McDonnell, Sterritt Bldg., Kansas City, Mo., is Engr.

Dallas, Tex.—The Southern Methodist University plans to spend $35,000 for the improvement of the water system.

Ft. Worth, Tex.—The Board of Reservoir Engineers contemplates raising the height of the Lake Worth dam three feet. The estimated cost is $9000. J. D. Trammell is Chn. of the Bd.

Marlin, Tex.—(Official)—An election will be held June 15 to vote on the question of issuing $15,000 in bonds, the proceeds of which will be used for the extension of the water system. J. H. Poncee is Secy. Noted May 20.

Slaton, Tex.—Bonds for $10,000 have been voted by the citizens, the proceeds of which will be used for the construction of a water system. C. C. Hoffman is City Clk. Noted Apr. 15.

Antlers, Okla.—Bids will be received about July 15 for making extensions to the water and sewer systems. C. E. Hagerty, Mid-Continent Bldg., Muskogee, is Engr. and A. Walker is City Clk. The estimated cost is $30,000.

Beggs, Okla.—(Official)—At the recent election the citizens defeated the bond issue for $35,000, the proceeds of which was to have been used for the construction of a water system. C. J. Brane is Town Clk. Noted May 20.

Claremore, Okla.—The city contemplates installing a filtration plant at an estimated cost of $10,000. M. A. Earl & Co., Flynn-Ames Bldg., Muskogee, is Engr. and L. S. Robson is City Atty.

Oilton, Okla.—(Jennings post office)—A water system will be constructed by Easton & Dunn. The cost has not as yet been given out.

Downey, Idaho—The City Council contemplates purchasing the water system of the Downey Water Co., owned by I. W. McConnell and John Ware.

Colfax, Wash.—Bonds for $60,000 have been voted, according to press reports, the proceeds of which will be used for the construction of a new pipe line and for the improvement of the water system. Noted May 13.

✚Prescott, Wash.—(Official)—The contract has been awarded to GEORGE SCHREIVER, Walla Walla, at $8449, for making extensions to the water system. J. C. McSherry is Clk. Noted Apr. 8 and May 20.

Seattle, Wash.—The City Council has authorized the laying of water mains in Fifth Ave., W., and contemplates laying water mains in 27th Ave. L. B. Youngs is Supt. of Water-Wks.

Bandon, Ore.—At an election to be held June 16 the citizens will vote on the question of issuing $80,000 in bonds, the proceeds of which will be used for the extension of the water system, recently purchased.

Portland, Ore.—An election will be held June 7 to vote on the question of purchasing 5000 water meters.

Imperial, Calif.—(Official)—Bids will be received until 7 p.m., June 16, by the City Clerk for constructing 41,809 sq.ft. of floor and lining reinforced with wire mesh in connection with the irrigation system. T. E. McDougal is City Engr. Noted Jan. 22, 1914.

St. Joseph de Levis, Que.—See item under "Sewers."

★Stratford, Ont.—(Official)—Bids will be received until 9 a.m., June 25, by F. A. Gaby, Ch. Engr., Hydro-Electric Power Comn., Continental Life Bldg., Toronto, for an elevated water tower.

SEWERS

✚Boston, Mass.—The contract for sewer construction in Perthshere Rd., Brighton District, has been awarded to CHARLES LATORELLA, at $1058.

Boston, Mass.—Bids will be received until June 8 by the Board of Public Works for the construction of drains and for sewer work in Rich and Randolph Rd., Oakland, Risewood and Glendower St. and for the construction of the Paine St. conduit, West Roxbury District.

Westfield, Mass.—At a recent election the citizens voted in favor of issuing $12,000 in bonds, the proceeds of which will be used for the construction of house sewers in various streets.

Worcester, Mass.—The city contemplates issuing $10,000 in bonds, the proceeds of which will be used for the construction of sewers.

Bridgeport, Conn.—The city contemplates the construction of 12,000 ft. of 12- to 48-in. sewers. A. H. Terry is City Engr.

★Greenwich, Conn.—(Official)—Bids will be received until 8 p.m., June 14, by the Sewer Commissioners for the construction of 22,500 ft. of sewers in various streets. S. E. Minor is Engr.

Brockport, N. Y.—Bids will soon be received for the construction of a sewage-disposal plant. The estimated cost is $25,000. C. C. Hopkins, 349 Cutler Bldg., Rochester, is Engr. Noted Mar. 18.

Freeport, N. Y.—An election will be held June 16 to vote on the question of constructing a sewer system. The estimated cost is $300,000. Noted Mar. 27.

✚Buffalo, N. Y.—The contract for the construction of a pipe sewer in Calais St. has been awarded to the FAHNING-GAVEY CONSTRUCTION CO., at $4491. Noted Apr. 15.

New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids were received May 26 by L. H. Pounds, Borough Pres., for the construction complete of the superstructures of the sewage pumping station, Section No. 2, and constructing sewers in Ave. V, as follows: Ruggles Robinson Co., $70,467; Simon Russek, $83,790; Conners Bros., $74,450; Northeastern Construction Co., $69,990; W. Flanagan, $64,900. J. Kress & Co., $61,900; N. H. Smyth, Inc., $85,900; F. J. Feron Co., $63,978; Marble Arch Co., $78,000; Kelly & Kelly, Inc., $67,700; William H. Egan, $57,789. Noted May 13.

New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids were received May 24 by Marcus M. Marks, Borough Pres., for the construction of sewers in Liberty St. from Nassau St. to Broadway, as follows: Briggs & McLoughlin, $7260; Fitzgerald & Brennan, $7771; Melrose Construction Co., $6313; P. J. Kearns Constructing Co., $7015; E. A. Mathews, $7753; U. S. Drainage & Irrigation Co., $9605; Capperini & DeBlassio, $7310; Patrick Reilly, $6949; Laconia Construction Co., $5778. Noted May 20.

Syracuse, N. Y.—Plans are being prepared by Marshall B. Palmer, Deputy City Engr., for the construction of approximately five miles of sewers in the 17th Ward. The estimated cost is $140,000.

Atlantic City, N. J.—The city contemplates an expenditure of about $100,000 for the extension of a storm water drainage system. J. W. Hackney is City Engr.

Bradford, Penn.—(Official)—Preliminary plans have been approved by the State Department of Health for the construction of a sewage treatment plant for the Bradford County Almshouse.

Cheyney, Penn.—(Official)—Preliminary plans have been approved by the State Department of Health for the construction of sewage-treatment works for the Cheyney Training School for Teachers.

Danville, Penn.—(Official)—Preliminary plans have been approved by the State Department of Health for the construction of a sewer system.

Montrose, Penn.—An election will be held June 8 to vote on the question of issuing $20,000 in bonds, the proceeds of which will be used for the construction of a sewage-disposal plant.

South Connellsville, Penn.—(Official)—Preliminary plans have been approved by the State Department of Health for the construction of a sanitary sewer system.

Wernersville, Penn.—(Official)—Preliminary plans have been approved by the State Department of Health for the construction of a sewage-treatment plant for the Galen Mountain Co.

Wilkes-Barre, Penn.—(Official)—Bids were received May 25 by F. H. Gates, City Clk., for construction of sewers, as follows: (a) circular brick and 24-in. terra cotta, (b) natco lock joint sewer tile and 24-in. terra cotta, (c) vitrified segment block and 24-in. terra cotta, D. M. Rosser, Kingston, (a) $47,586, (b) $45,343, (c) $47,020; James Ferry & Son, Baltimore, Md., (a) $67,390, (b) $62,530, (c) $63,699; Melan & Ryan, Wilkes-Barre, (a) $57,700, (b) $52,715, (c) $53,525; John J. Hart, Peekskill, N. Y., (a) $63,127, (b) $61,649, (c) $62,801; Charles Dugan, Williamsport, (a) $56,194; (b) $52,121, (c) $51,785. B. K. Finch is City Engr. Noted Apr. 22.

Annapolis, Md.—(Official)—The State Department of Health has approved plans for the construction of a sewer system and a sewage-disposal plant. The state has appropriated $50,000 for the work.

Germantown, Md.—(Official)—The State Department of Health has approved plans for the construction of a sewer system.

Ocean City, Md.—(Official)—The State Department of Health has approved plans for the construction of a sewer system. Noted Dec. 24.

Salisbury, Md.—(Official)—The city contemplates the construction of water and sewer systems and a sewage-disposal plant. Robert R. Morse is City Engr.

✚Richmond, Va.—The contract for the construction of a section of the Beacon Quarter Branch sewer has been awarded to McAUGHEY & VAN DOREN, at $65,000.

✚South Richmond, Va.—(Richmond post office)—The contract has been awarded to A. W. MAYNARD, at $4000, for the construction of a sewer in Bainbridge St. from 14th St. to Cowardin Ave.

Hertford, N. C.—(Official)—Bids will be received until 7 p.m., June 7, by the Board of Commissioners, for the purchase of $50,000 in bonds, the proceeds of which will be used for the construction of sewers. W. E. White is Mayor. Noted May 27.

Warrenton, N. C.—At a recent election the citizens voted to issue $50,000 in bonds, the proceeds of which will be used for the construction of a sewer system and water works. Noted Apr. 29.

✚Walterboro, S. C.—The contract for sewer construction has been awarded to the DUSARD CONSTRUCTION CO., Atlanta, Ga., at $13,660. Noted Mar. 25 and Apr. 22.

Greenville, Fla.—The city contemplates the construction of a sewer system. F. A. Bishop is Engr.

Okolona, Miss.—(Official)—The contract for the construction of a sewer system estimated to cost $40,000 will be awarded about June 17. Frank L. Wilcox, Syndicate Trust Bldg., St. Louis, Mo., is Engr. Noted Apr. 8 and May 6.

Hammond, La.—The citizens recently voted to issue $40,000 in bonds, the proceeds of which will be used for the construction of a sewer system and a sewage-disposal plant. Noted Apr. 29.

Cleveland, Tenn.—Bids will be received until June 17 by C. A. Mee, Mayor, for the construction of a sewer system. The estimated cost is $75,000. Noted Apr. 29.

Lexington, Ky.—The city contemplates the construction of a sewage-disposal plant.

Chillicothe, Ohio—Plans are being prepared by H. M. Redd, City Engr., for the construction of approximately 1400 ft. of 36- and 40-in. storm lateral sewers to intersect Honey Creek storm sewer.

✚Cincinnati, Ohio—(Official)—The contract for the construction of sewers in Manns, Latham and Beech Ave. has been awarded to the CONNELLY CONSTRUCTION CO., at $17,108. Frank Krug is City Engr. Noted May 6 and 27.

Cleveland, Ohio—Bids will be received until June 10 by the Commissioner of Purchase and Supplies for the construction of sewers in Sandusky Ave. between East 93rd and East 102nd St. and in Norman Ave. Robert Hoffman is City Engr.

Cleveland, Ohio—(Official)—Bids were received May 27 by the Commissioner of Purchase and Supplies for the construction of the Superior Ave. sewer, as follows: Amata Construction Co., $23,239; J. Connolly Construction Co., $25,939; William Lehman, $25,086; W. P. Gibbons Contracting Co., $26,387; James Duff Construction Co., $27,985; Hoag & Zullo, $29,697. Robert Hoffman is City Engr. Noted May 20.

Columbus, Ohio—Bids will be received until June 16 by the Board of County Commissioners for the construction of sewers and a sewage-disposal plant for the Franklin County Infirmary.

Columbus, Ohio—Bids will be received until June 11 by George A. Borden, Dir. of Pub. Ser., for moving and resetting three boilers from the main sewage pumping station and for the installation of mechanical stokers.

Findlay, Ohio—(Official)—Bids will be received until Jun 5 by the Director of Public Service for the construction o Hagerman Run Conduit estimated to cost $25,000. H. A Glathart is City Engr Noted May 27.

✚Piqua, Ohio—The contract for the construction of storm sewers in South Downington and Wayne St. and sanitar sewers in Adams St. has been awarded to BOYD & COOK Dayton, at $9458.

Frankfort, Ind.—Plans are being prepared by R. H. Boyn ton, City Engr., for the construction of a district and local sewer system. Bids will be received about June 17 by C. H Cohee, City Clk., for the work.

Chicago, Ill.—Bids will be received until June 18 by the Board of Local Improvements for the construction of the Norwood Park sewer system. C. D. Hill is Engr.

✚Herrin, Ill.—(Official)—The contract for the construction of a mechanical filtration plant, with a 1,000,000 gal. daily capacity, has been awarded to the PITTSBURGH FILTER MFG. CO., Pittsburgh, Penn., at $18,107. Other bids were: New York Continental Jewell Filtration Co., $18,043; Kennicott Co., $19,000; H. H. Hall Construction Co., $18,036. R. L. Adams is City Engr. Noted May 20.

Peoria, Ill.—The contract will soon be awarded for the construction of the West Section of the North Peoria sewer in McClure Ave. and North St. The estimated cost is $8257. Noted May 20.

Sparta, Ill.—See item under "Water Supply-Irrigation."

✚Beloit, Wis.—The contract for the construction of one mile of 8-in. vitrified pipe sewer has been awarded to HANSEN & NELSON, Racine, Wis. G. E. Heebink is City Engr.

Milwaukee, Wis.—(Official)—Bids will be received until June 4 by F. Heintz for the construction of storm and sanitary sewers. The estimated cost is $35,000. G. H. Randall is City Engr. Noted May 20.

New Glarus, Wis.—Bids will be received until 7:30 p.m., June 4, by E. J. Hoesly, Clk., for sewer construction. W. G. Kirchoffer is Engr.

Oshkosh, Wis.—Bids will be received until 2 p.m., June 4, by George H. Randall, City Engr., for the construction of sanitary sewers. The estimated cost is $35,000. Noted May 20.

✚Racine, Wis.—(Official)—The Board of Public Works has awarded the contract for the construction of sewers in 21st St. from Lake Michigan to West Blvd. to HANS C. HAUSEN, 2348 Kinzie Ave., Racine, at $79,975. Other bids were: Johnson & Thomsen, Racine, $81,883; James Cape & Sons Co., Racine, $82,812; E. R. Harding, Racine, $84,106; Albert H. Prunge, Grand Rapids, Mich., $86,631. P. H. Connolly is City Engr. Noted May 20.

South Milwaukee, Wis.—Bids will be received about June 10 by John O'Connell, City Clk., for sewer construction.

✚Wausau, Wis.—(Official)—The contract has been awarded to CARL LOTZ, Wausau, for the construction of sewers in Bellis and Seventh St. and in Garfield Ave. at $17,250. F. W. KRAUSE, Wausau, has been awarded the contract for the construction of the Franklin St. sewer at $2660. B. C. Gowen is City Engr. Noted May 20.

Wauwatosa, Wis.—Bids will be received about Sept. 3 by A. V. Brigham, City Clk., for the construction of storm sewers estimated to cost $25,000.

Des Moines, Iowa—The city contemplates an expenditure of about $200,000 for construction of the Closer Creek sewer system. F. Carrs is Engr.

✚Tripoli, Iowa—(Official)—The contract for the construction of a sewer system and a sewage-disposal plant has been awarded to the CEDAR RAPIDS CONSTRUCTION CO., at $20,728. Other bids were: D. E. Keller Co., Davenport, $23,654; Michael McEllicot, Evanston, Ill., $22,833; Dearborn Construction Co., Waterloo, $25,882; Taylor & Moriarty, Sioux City, $22,964; Henry Rees, Quincy, Ill., $24,701. Noted Apr. 22 and May 13.

St. Paul, Minn.—Bids will be received about July 10 for the construction of the Como-Snelling sewer system. The estimated cost is $289,000. Noted May 13.

Augusta, Kan.—Preliminary plans are being prepared by Worley & Black, Engr., 301 Reliance Bldg., Kansas City, Mo., for the construction of a sewer system. E. Weidlein is City Clk.

Omaha, Neb.—The city contemplates issuing $100,000 in bonds for the construction of a sewer system.

Omaha, Neb.—The city contemplates the construction of sewers in Miller Park, estimated to cost $62,000; in Sprague Ave. from 36th to 43rd St., estimated to cost $57,000; and a sewer from 42nd to 47th St. to take the place of the present open creek sewer.

Laurel, Mont.—The city contemplates the construction of sewer work as follows: District No. 13, 2180 ft. of 8-in. pipe sewers, estimated to cost $3900; District No. 14, 6510 ft. of 8-in. pipe sewers, manholes and flush tanks, estimated to cost $9820; District No. 12, 2610 ft. of 8-in. pipe sewers, estimated to cost $4500. O. H. Bundy is City Clk.

Wibaux, Mont.—The city contemplates the installation of a sewer system. The estimated cost is $14,000. J. R. Quamme is City Clk.

Harrisonville, Mo.—Preliminary plans are being prepared for the construction of a sewer system, estimated to cost $30,000. W. B. Rollins & Co., 439 Midland Bldg., Kansas City, Mo., is Engr.

St. Louis, Mo.—(Official)—Bids will be received by the city until June 18 for the construction of sewers in the Sixth District. The estimated cost of the work is $37,000. E. R. Kinsey is Pres., Bd. of Pub. Ser.

Antlers, Okla.—See item under "Water Supply-Irrigation."

✚Anderson, Tex.—The contract has been awarded to the J. G. BROWNE CO., Houston, for the construction of a sewer system. Noted Sept. 10.

✚American Falls, Idaho—(Official)—The contract for sewer construction has been awarded to S. A. FORTER, American Falls, at $22,416. Frank Moench is City Engr. Noted Apr. 22.

Mesa, Ariz.—At an election held May 18 the citizens voted to issue $75,000 in bonds, the proceeds of which will be used for the construction of a sewer system and a septic tank. Noted Apr. 29.

✚Cathlamet, Wash.—The contract for the construction of a sewer system has been awarded to C. G. RANDLES, at $9784.

Chehalis, Wash.—Bids will be received until 4 p.m., June 7, by the City Commissioners for the construction of a sewer system. The estimated cost is $25,366. D. W. Boone is City Clk. Noted May 27.

Everett, Wash.—Bids will soon be received by Louis Lesh, City Clk., for the construction of a sewer system estimated to cost $11,000. J. W. Hoover is City Engr.

Seattle, Wash.—The Board of Public Works contemplates the construction of a sewer in the tunnel at Second Ave. and West 39th St. The estimated cost is $12,000. A. L. Valentine is Chn., Bd. of Pub. Wks.

Seattle, Wash.—Plans have been approved by the Board of Public Works for the construction of a sewer system in Stroud Ave., estimated to cost $31,000. Noted Oct. 15 and 29.

Walla Walla, Wash.—Bids will be received until June 8 by W. R. Rehorn, City Engr., for the construction of vitrified pipe sewers estimated to cost $9000.

North Bend, Ore.—(Official)—Bids will be received until 5 p.m., June 8, by C. E. Maybee, City Recdr., for sewer construction estimated to cost $25,300. R. L. Cavanagh is City Engr. Noted May 6 and 13.

Marysville, Calif.—Plans are being prepared by M. Meek, City Engr., for the construction of sanitary sewers. The estimated cost is $20,000. An election will soon be held to vote on the question of issuing bonds. Noted Apr. 8.

✚Sacramento, Calif.—The City Commission has awarded the contract for the construction of the fifth unit of the trunk sewer in the annex district to JAMES KENNEDY, Los Angeles, at $104,912. Noted May 20.

San Francisco, Calif.—Bids will soon be received for the construction of a sewer in Fifth St., between Howard and Brannan St. The estimated cost is $80,000. Frederick J. Churchill is Secy.

Sierra Madre, Calif.—Plans have been prepared by C. Bixby, City Engr., for the construction of a sewer system and a sewage-disposal plant for the Cañon District. Noted Jan. 21.

✚Stockton, Calif.—The contract for the installation of sewers in the Fair Oaks District has been awarded to BISHOP & TUMELTY, Stockton, at $7285.

St. Joseph de Levis, Que.—The Town Council contemplates extending the sewer and water-works system. The estimated cost is $150,000. Gawin & Beauchemin is Engr.

Burlington, Ont.—Bids will be received until June 15 by the Town Clerk for the construction of sanitary storm sewers under Contract A, constructing sewage-disposal plant under Contract P, furnishing sewer pipe under Contract S, constructing sewage-disposal works under Contract X. Chipman & Power is Engr.

Thorold, Ont.—The city contemplates the construction of a sewer system estimated to cost $25,000. J. S. Clark is Clk.

Toronto, Ont.—Bids will be received until June 8 by T. L. Church, Chn. Bd. of Control, for the construction of sewers in various streets.

GARBAGE

✚Cliffside Park, N. J.—(Cliffside post office)—The contract has been awarded to JAMES GRICCO, Cliffside Park, by the Council for the removal and collection of garbage.

★Detroit, Mich.—(Official)—Bids will be received until 10 a.m., June 24, by George H. Fenkell, Comr. of Pub. Wks., for completing the garbage reduction plant on the northeast side of the Detroit Terminal Railroad between Shoemaker and Harper Ave.

STREETS AND ROADS

✚Boston, Mass.—The contract for constructing a bituminous macadam roadway in Oakland St., Dorchester District, has been awarded to W. J. BARRY, at $7345. Other bids were: D. M. Biggs & Co., $7413; J. Doherty, $7559; Martino de Matteo, $7761; John Landis, $8543; Clark & Gore, $8706; Charles J. Jacobs Co., $8780; W. J. Rafferty & Co., $9574. Noted May 20.

Boston, Mass.—Bids will be received until June 4 by the Public Works Department for bituminous macadam roadways in Fletcher St. and Howitt Rd., West Roxbury District, and until June 7 for bituminous macadam roadways in Chase, Hamlet, Grace and Ridgewood St., Dorchester District.

Boston, Mass.—Bids will be received until June 4 by the Supply Department for furnishing 50,000 gal. of nonasphaltic road oil. D. Frank Doherty is Supt.

★Albany, N. Y.—(Official)—Bids will be received until 1 p.m., June 18, by Edwin Duffey, State Highway Comr., for improving highways in various counties.

✚★Albany, N. Y.—(Official)—Contracts have been awarded for constructing roads in various counties as follows: Road No. 1238, Broome County, 1.03 miles, TYNE & WILLEY, Binghamton, $49,274; Road No. 5412, Broome County, 0.28 mile, PADDLEFORD & KING, Sherburne, $11,135; Road No. 5440, Broome County, 0.41 mile, ARTHUR D. OSBORNE, Binghamton, $20,488; Road No. 1269, Cattaraugus County, 5.62 miles, WOOLSEY CONSTRUCTION CO., Davenport, $74,127; Road No. 1275, Cattaraugus County, 3.95 miles, O. M. SEVERSON & CO., Erie, Penn., $67,727; Road No. 5544, Cattaraugus County, 6.88 miles, D. D. DUGAN & SONS, Olean, $132,688; Road No. 1270, Delaware County, 7.69 miles, SAMUEL BESKIN, Beacon, $72,768; Road No. 1271, Delaware County, 11.40 miles, FULTON ENGINEERING CO., INC., Albany, $128,446; Road No. 1272, Delaware County, 5.84 miles, E. J. ANDERSON, Menands, $63,898; Road No. 1268, Genesee County, 4.49 miles, JOHN JOHNSON CONSTRUCTION CO., Buffalo, $39,732; Road No. 1242, Greene County, 4.43 miles, JOHN L. HAYES CONSTRUCTION CO., Yonkers, $50,420; Road No. 5553, Oneida County, 5.73 miles, B. F. S. CO., Herkimer, $49,893; Road No. 1139, Ontario County, 1.38 miles, THOMAS F. MURRAY, Le Roy, $17,306; Road No. 1276, Ontario County, 1.23 miles, SCHROEDER-HICKS CONTRACTING CO., Rochester, $23,272; Road No. 1277, Ontario County, 1.53 miles, LAKE SHORE CONSTRUCTION & SUPPLY CO., Dunkirk, $66,349; Road No. 1278, Ontario County, 8.63 miles, H. BENEDICT, Williamsport, Penn., $55,206; Road No. 1262, St. Lawrence County, 5.07 miles, W. T. THAYER & CO., Chateaugay, $44,882; Road No. 1266, St. Lawrence County, 3.09 miles, THOMAS O'BRIEN, Watertown, $31,802; Road No. 5551, Schenectady County, 3.34 miles, WILLIAM GREEN, $32,462; Road No. 1274, Suffolk County, 10.50 miles, TOWN OF SOUTHAMPTON, Southampton, $113,068; Road No. 1081, Washington County, 3.34 miles, JOHN CRISORIO, Albany, $27,354; Road No. 1223, Washington County, 5.96 miles, E. J. ANDERSON, Menands, $62,261. Noted May 6 and 27.

Bath, N. Y.—The city contemplates an expenditure of $40,000 for paving Washington, Liberty and Steuben St.

East Aurora, N. Y.—The citizens voted to pave Buffalo Rd., at an estimated cost of $20,000.

Fredonia, N. Y.—Bonds for $18,000 were sold, the proceeds of which will be used for street improvements.

New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids will be received until 11 a.m., June 9, by L. H. Pounds, Borough Pres., for regulating, paving, grading and otherwise improving various streets.

✚New York, N. Y.—Borough of Brooklyn)—(Official)—Contracts have been awarded for improving (a) 84th St. from Ft. Hamilton Parkway to Seventh Ave., (b) 72nd St. from Eighth Ave. to Ft. Hamilton Ave., (c) 55th St. from 15th to New Utrecht Ave., (d) First St. from Foster to 18th Ave., (e) 51st St. from 13th to 15th Ave., (f) 13th Ave. from 75th to 79th St., (g) Stone Ave. from Riverdale Ave. to Newport St., (h) Montgomery St. from Franklin to Bedford Ave., (i) East 17th St. from Ave. M to Ave. N, (j) East 13th St. from Kings Highway to Ave. U, (k) East 13th St. from Ave. O to Kings Highway, (l) Bay 23rd St. from 86th to Benson Ave., as follows: TOPEKA PAVING CO., INC., (a) $3603, (l) $4796; BROOKLYN ALCATRAZ ASPHALT CO., (b) $4392, (c) $8863, (d) $6899, (e) $6342, (f) $6082, (i) $4057, (j) $15,338, (k) $7568; SICILIAN ASPHALT PAVING CO., (g) $5276, (h) $4160. Noted May 13.

New York, N. Y.—(Borough of Manhattan)—(Official)—Bids were received May 24 by Marcus M. Marks, Borough Pres., for improving (a) 24th St. from Sixth to 10th Ave., (b) 54th St. from Third to Lexington Ave., (c) 160th St. from Ft. Washington Ave. to a point 418 ft. west, (d) 30th St. from Ninth to 10th Ave., (e) 38th St. from First to Second Ave., as follows: Barber Asphalt Paving Co., (a) $20,132, (b) $3538, (c) $3877; Uvalde Asphalt Paving Co., (a) $28,810; (b) $4206, (c) $4587; Sicilian Asphalt Paving Co., (a) $10,320, (b) $3492, (c) $4322; Aztec Paving Co., (a) $18,186, (b) $3032, (c) $4509; Cleveland Trinidad Paving Co., (a) $24,050, (b) $4239, (c) $3980; Asphalt Construction Co., (b) $3474, (c) $3269; Fitzgerald & Brennen, (d) $12,973, (e) $12,122; P. J. Kearns Contracting Co., (d) $13,717, (e) $10,345; W. F. Fitzgerald, (d) $12,035, (e) $11,110. Noted May 20.

✚Rochester, N. Y.—The contract for paving the East Side Blvd. from the city line to Hudson Ave. has been awarded to WHITMORE, RAUBER & VICINUS, Rochester, at $35,558.

Bernardsville, N. J.—The Township Committee has voted to improve the road from the Coffee House to Van Dorn's Mill, at an estimated cost of $4000.

✚Flemington, N. J.—The Board of Chosen Freeholders has awarded a contract for the improvement of the Whitehouse-Lebanon Rd. with macadam to M. IRVING DEMAREST, Sewaren, at $16,802. Other bids were: J. L. LeCompte, $19,874; C. H. Winans Co., $20,313; Burk & Burnham, $21,878; William R. Moore, $24,905, and John Dorer, $26,535.

Jersey City, N. J.—Bids will be received until 2 p.m., June 10, by the Board of Commissioners, for repaving Montgomery St. from Grove to Brunswick and from Merselles St. to West Side Ave.

Jersey City, N. J.—Bids will be received until 3 p.m., June 10, by the Board of Chosen Freeholders of Hudson County for the improvement of the Newark Turnpike.

Newark, N. J.—Bids will be received until 3:15 p.m., June 17, for repaving Ferry St. from Westerly Terminus at Market St. to Merchant St., Clifton Ave. from Second St. to Abington Ave., Oraton St. from Delavan to Elwood Ave., and Richards St. from Ferry St. to Passaic Ave.

Washington, N. J.—The Board of Trade contemplates improving the road between Washington and Oxford, by paving with macadam.

West New York, N. J.—(Official)—Bids will be received until 8 p.m., June 8, by the Town Council, for improving 22nd St. from Bergenline Ave. to the Hudson County Blvd. J. L. Wolfe is Town Clk.

✚New Castle, Penn.—The contract for paving East Washington St. from Arlington Ave. to the city line has been awarded to M. J. SCANLON, at $16,093. Other bids were: Charles Staph, $17,400; Woods & Golder, $17,215; C. E. Kimbrough, $16,716; M. E. Miller, $16,908; Burns Bros., $16,577.

★Philadelphia, Penn.—(Official)—Bids will be received until noon, June 15, by the Bureau of Highways for continuing the improvement of the Northeast Blvd. from Rhawn St. northward, including branches.

Pittsburgh, Penn.—(Official)—Bids will be received until 10 a.m., June 10, by Hyatt M. Cribbs, Controller of Allegheny County, for improving a number of county roads.

Slatington, Penn.—Bids will be received until 7 p.m., June 7, for constructing approximately 5900 yd. of brick or concrete pavement on lower Main St. A. N. Kennel is Borough Secy. and Charles W. Grosshart, Allentown, is Borough Engr.

✚Annapolis, Md.—Contracts have been awarded for the application of 150,000 gal. of road oil to the roads in Caroline, Wicomico, Somerset, Worcester and Dorchester Counties to the UNITED GAS IMPROVEMENT CO., at $9690, and for oiling roads in Talbot, Kent, Queen Anne and Cecil Counties to the ATLANTIC REFINING CO., at $7069.

Baltimore, Md.—Press reports state that the Paving Commission plans to repave Camden St.

Eastville, Va.—Bids will be received until June 15 by G. T. Tyson, Clk., for the sale of $25,000 in bonds, the proceeds of which will be used for permanent road improvement.

✚Richmond, Va.—The Commissioners of Henrico County have awarded contracts for road construction as follows: 3.5 miles of gravel to T. W. MARTSON, Roxbury; 7.3 miles of gravel to BETTS & BOICE, Chestertown; 1.61 miles of bituminous macadam to LEWIS LAWSON, Norfolk; 1.69 miles macadam on Osborne Turnpike to COLVIN & GELSON, Culpepper; four miles of macadam to L. R. COLBERT, Massaponax.

Dobson, N. C.—Bods for $10,000 will be voted on at the election to be held June 8, the proceeds of which will be used for constructing roads in Long Hill Township, Surry County.

✚★Greenville, S. C.—(Official)—Contracts have been awarded for constructing asphalt and bituminous pavements to the WEST CONSTRUCTION CO., Chattanooga, Tenn.; brick and concrete pavements to SLATTERY & HENRY, Greenville, and for sidewalks to the GREENVILLE TILE CO., Greenville. Noted May 6, and under Greenville, N. C., in the issue of May 20.

Titusville, Fla.—An election will be held June 15 to vote on the question of issuing $150,000 in bonds, the proceeds of which will be used for constructing roads and bridges in Brevard County.

Selma, Ala.—Bids will be received until June 21 by P. H. Pitts, Probate Judge, for improving approximately 3½ miles of the Blablock and Uniontown Rd.

Natchitoches, La.—The citizens of Natchitoches Parish voted in favor of issuing $40,000 in bonds, the proceeds of which will be used for constructing roads.

Bristol, Tenn.—Press reports state that bids will be received until June 20 by W. H. Flynn, Comr. of Finance, for the sale of $10,000 in bonds, the proceeds of which will be used for improving streets.

Chattanooga, Tenn.—The City Commission will repave Market St. with wood blocks or asphalt. E. D. Bass is one of the Comrs.

Jasper, Tenn.—At a recent election the question of issuing $200,000 in bonds, the proceeds of which was to have been used for constructing roads in Jasper County, was defeated.

Covington, Ky.—(Official)—Bids will be received until 10 a.m., June 8, by the Fiscal Court of Kenton County for the reconstruction of the Lexington Pike State Aid Rd. John B. Dillon is County Clk.

✚Georgetown, Ky.—The contract for paving Main St. with asphalt has been awarded to the MERRILL CONSTRUCTION CO., Chattanooga, Tenn.

Louisa, Ky.—At a recent election the question of issuing $100,000 in bonds, the proceeds of which was to have been used for constructing roads, was defeated. Noted Apr. 15.

Maysville, Ky.—At a recent election the question of issuing $200,000 in bonds, the proceeds of which was to have been used for constructing roads in Mason County, was defeated.

Maysville, Ky.—(Official)—Bids will be received until 8 p.m., June 7, by the City Council for improving a number of streets. J. Wesley Lee is Mayor. Noted Mar. 18.

✚New Castle, Ky.—The contract for constructing a macadam pike between this city and Eminence has been awarded to the PHELPS-POST-GUYN CO., Lexington, at approximately $15,000. Noted May 13.

Tompkinsville, Ky.—The Commissioners of Monroe County recalled the election which was to have been held May 15 for the purpose of voting on the question of issuing bonds, the proceeds to be used for road construction. Noted Apr. 15.

Whitley City, Ky.—An election will be held July 10 to vote on the question of issuing $100,000 in bonds, the proceeds of which will be used for constructing roads in McCreary County.

Cincinnati, Ohio—(Official)—Bids will be received until noon, June 25, by the Board of Commissioners of Hamilton County for improving the Compton Rd. from the Cincinnati and Hamilton Pike to the Carthage Pike, Springfield Township.

Columbus, Ohio—Bids will be received until noon, June 15, by George A. Borden, Dir. of Pub. Ser., for paving Grand Drive in Franklin Park.

Grand View Heights, Ohio—(Columbus post office)—Bids will be received until noon, June 29, by Thomas G. Constable, Clk., for paving and constructing sidewalks on Wyandotte Lane and Lincoln Rd.

Mt. Gilead, Ohio—Bids will be received until 11 a.m., June 25, by C. O. Higgins, Audr. of Morrow County, for improving and macadamizing Foust Rd. in Westfield Township.

Painesville, Ohio—(Official)—Bids will be received until noon, June 18, by the Board of Commissioners of Lake County for improving the Narrows-Center Rd. in Perry Township.

Penfield, Ohio—(Wellington post office)—Bids will be received until 1 p.m., June 10, by Ira M. Starr for improving and paving South Center Rd.

Rocky River, Ohio—Bids will be received until noon, June 15, by Frank Mitchell, Clk., for grading, draining and paving Frazier Drive.

Toledo, Ohio—Bids will be received until 10 a.m., June 28, by the Board of Commissioners of Lucas County for grading, draining and macadamizing Roads Nos. 63 and 64 in Monclova Township.

Indiana—(Official)—Bids will be received for road improvements in Indiana as follows: Brookville, until 1 p.m., June 7, by the Commissioners of Franklin County, for constructing a stone road in Highland Township; Greensburg, until 1 p.m., June 7, by the Commissioners of Decatur County for constructing a road in Washington Township; Portland, until 10 a.m., June 7, by the Commissioners of Jay County for constructing crushed stone roads in Wayne Township; English, until 2 p.m., June 7, by the Commissioners of Crawford County, for constructing stone roads in Sterling and Union Townships; Kentland, until 2 p.m., June 7, by the Commissioners of Newton County, for constructing a macadam road in Colfax Township; Franklin, until 2 p.m., June 7, by the Commissioners of Johnson County, for constructing a gravel road in Pleasant Township; Jeffersonville, until 10 a.m., June 7, by the Commissioners of Clark County, for constructing a macadam road in Silver Creek Township; Greencastle, until 2 p.m., June 7, by the Commissioners of Putnam County, for constructing a gravel road in Washington Township; Crawfordsville, until 10 a.m., June 8, by the Commissioners of Montgomery County, for constructing a concrete and stone road in Madison Township; Corydon, until 2 p.m., June 8, by the Commissioners of Harrison County, for constructing a macadam road on line between Harrison and Webster Townships; Fowler, until 1 p.m., June 9, by the Commissioners of Benton County, for constructing roads in Grant and Pine Townships; Laporte, until 10 a.m., June 10, by the Commissioners of Laporte County, for constructing roads in Kankakee and Noble Townships; Noblesville, until 10 a.m., June 15, by the Commissioners of Hamilton County, for constructing a road in Washington Township.

✚Indianapolis, Ind.—The contract for constructing a gravel road in Pike Township, Marion County, has been awarded to McKINSEY & JENKINS, Frankfort, at $11,571.

✚West Baden, Ind.—According to press reports, the West Baden Springs Co. has awarded a contract to L. R. FIGG CO., Louisville, Ky., for the construction of a macadam boulevard. The estimated cost of the work is $40,000.

✚Olney, Ill.—The contract for grading, building culverts and macadamizing portions of Whittle Ave. has been awarded to KEGAN BROS., Brazil, Ind., at $8324.

✚Peoria, Ill.—The contract for paving Moss Ave. from Elizabeth St. to Western Ave. has been awarded to JOHN W. BUSHNELL, at $18,936.

✚Springfield, Ill.—(Official)—Bids were received May 26 by the State Highway Commission and contracts awarded for road construction, as follows: St. Clair County, Section A, H. H. HALL CONSTRUCTION CO., East St. Louis, $16,900; Marshall County, Section B, AJAX CONSTRUCTION & ENGINEERING CO., Gary, Ind., $4395; Marshall County, Section C, CAPPERUNE & DEYO, Bradford, $5972.

Springfield, Ill.—(Official)—Bids will be received until 11 a.m., June 9, by the State Highway Commission for constructing roads in Livingston and Kane Counties. All cement is to be furnished by the State.

✚Kilbourn City, Wis.—The contract for paving Broadway has been awarded to GARVEY & WEYENSBERG CO., Kaukauna, Wis., at $10,152.

✚Lake Geneva, Wis.—(Official)—The contract for improving Main St. from Cook to Maxwell St. has been awarded to GEORGE WELCH, Beloit, at $5083. Other bids were: D. A. Thatcher, $5233; Birdsall Griffith Construction Co., $5642; Cullen Friestedt Co., $7434. Noted May 6.

Milwaukee, Wis.—Bids will be received until 2 p.m., June 7, by L. G. Widule, County Clk., for grading and paving three miles of Center Rd. H. J. Kuelling is County Highway Comr.

Oconto, Wis.—The City Council contemplates an expenditure of $19,000 for the improving a number of streets.

✚Storm Lake, Iowa—The contract for constructing 51,920 sq.yd. of reinforced-concrete pavement and 17,400 lin.ft. of curb has been awarded to the MOORE-SIEG CONSTRUCTION CO., Waterloo, at $17,502.

Duluth, Minn.—Bids will be received until 2 p.m., June 7, by O. Halden, Audr. of St. Louis County, for constructing 3½ miles of the Brevator Rd. and 5½ miles of the Hayes Rd.

St. Cloud, Minn.—Bids will be received until 3 p.m., June 15, by George G. Magnuson, City Clk., for constructing 10,300 yd. of concrete sidewalks.

✚Great Bend, Kan.—The contract for constructing 23,580 sq.yd. of concrete pavement has been awarded to WATTS & AMERMAN, Salina, at $55,400.

Central City, Neb.—Bids will be received until 7:30 p.m., June 14, by C. F. Newmyer, City Clk., for constructing concrete crossings, walks and approaches.

Norfolk, Neb.—Bids will be received until 5 p.m., June 7, by P. F. Stafford, City Clk., for constructing concrete walks, approaches and crossings.

Larimore, N. D.—Bids will be received until 7 p.m., June 7, by N. J. Powell, City Audr. for constructing sidewalks and curbs during 1915.

Hamilton, Mont.—Bids will be received until June 7 by F. E. Robbins, Clk. of Ravalli County, for grading 6000 lin.ft. of road near Stevensonville and a road on Hamilton Heights.

Laurel, Mont.—Plans have been completed for the improvement of Main St. The estimated cost of the work is $28,000.

Brunswick, Mo.—Press reports state that bids will soon be received for laying 20,000 sq.yd. of brick pavement. The Woodward Engineering Co., 901 Orear Leslie Bldg., Kansas City, Mo., is Engr.

St. Louis, Mo.—(Official)—Bids will be received until June 11 by the city for paving seven streets with vitrified brick. The total cost of the work is $60,000. E. R. Kinsey is Pres., Bd. of Pub. Ser.

Orange, Tex.—An election will be held June 19 to vote on the question of issuing $25,000 in bonds, the proceeds of which will be used for improving a portion of the Mansfield Ferry Rd.

✚Palmer, Tex.—A contract for constructing one mile of concrete sidewalks has been awarded to J. W. JARRETT, Waxahachie.

Port Lavaca, Tex.—At a recent election the citizens voted in favor of issuing $12,000 in bonds, the proceeds of which will be used for improving streets. Noted Apr. 1.

✚Richards, Tex.—A contract for constructing gravel roads has been awarded to the J. G. BROWNE CO., Houston, at $50,000.

✚Chehalis, Wash.—The contract for constructing 1½ miles of concrete road near Curtis has been awarded to the JACOBSON-BADE CO., Portland, at $15,458. Noted Apr. 8 and 22.

✚Ephrata, Wash.—(Official)—The contract for constructing seven miles of permanent highway near Wheeler has been awarded to W. G. MULLIGAN CO., Spokane, at $14,498. Other bids were: Worthen & Satterthwaite, $23,517; Mohr Construction Co., $17,906; Dunn & Hogan, $19,270; G. L. Stickler, $17,400. Noted Apr. 29.

✚Kalama, Wash.—The contract for constructing Permanent Highway No. 1-A has been awarded to N. P. WILLIS, Hoquiam, at $10,490.

Mt. Vernon, Wash.—Bids will be received until June 8 by the Commissioners of Skagit County for improving 2½ miles of the Montborn-McMurray Rd. A. L. Strong is County Engr.

Olympia, Wash.—Bids will be received until June 14 by the State Highway Commissioners for clearing, grading and draining about one mile of Inland Empire Highway across Wenas Creek, Kittitas and Yakima Counties and 7½ miles of Pacific Highway from Vancouver north in Clarke County.

Olympia, Wash.—Bids will soon be received for paving 14th, 15th, 17th, from Main to Columbia St. and Columbia St. from 14th to 17th St.

Seattle, Wash.—Bids were received for constructing Permanent Highway No. 9-A, as follows: Sloane Bros., Seattle, $21,259; Burnett Construction Co., Seattle, $21,712; Quigg Construction Co., Seattle, $21,875; R. R. Wheaten, Seattle, $22,060; William Martell; Seattle, $22,250; McGuire Bros., Seattle, $22,300; G. A. Banderet, Seattle, $22,900; Shephard & Cressman, Seattle, $22,900; West Coast Construction Co., Seattle, $22,900; P. Engstrand & Biddle Co., Seattle, $27,992; Ferch & Gass, Seattle, $28,240. Noted May 6.

Seattle, Wash.—Bids will be received until June 14 by the Commissioners of King County for the construction of the Redmond-Issaquah Rd. The estimated cost of the work is $60,000.

Wenatchee, Wash.—Bids will be received the latter part of June for the improvement of Chelan Ave., at an estimated cost of $11,000. Noted Feb. 4.

✚Tillamook, Ore.—The contract for the construction of four sections of road near Tillamook has been awarded to SANDBERG-LOGUS, Portland, at $11,000.

Calexico, Calif.—All bids received for improving Imperial Ave. and other streets have been rejected. The work will be readvertised.

East San Diego, Calif.—E. A. McAlpine, San Diego, at $14,343, submitted the lowest bid for improving Swift Ave.

✚Los Angeles, Calif.—The contract for improving Manhattan Pl. from Third St. to Wilshire Blvd. has been awarded to GEORGE R. CURTIS, 552 South St., Louis St., at $20,190.

✚Richmond, Calif.—A contract for street work has been awarded to GEORGE W. CUSHING, at $18,023.

✚Santa Barbara, Calif.—The contract for paving Mason, Helena and Anacapa St. has been awarded to A. L. PENDOLA, at $9012.

London, Ont.—(Official)—Bids will be received until 4 p.m., June 9, by the City Clerk for constructing approximately 18,000 sq.yd. of asphalt pavement on concrete base. H. A. Brazier is City Engr.

✚New Westminster, B. C.—The contract for paving 12th St. has been awarded to the COLUMBIA BITULITHIC CO., New Westminster, at $13,668.

INDUSTRIAL WORKS

✚Augusta, Maine—Lewis A. Crossett, North Abington, Mass., has awarded the contract for the construction of a four-story, 44x250-ft. brick factory on Williams St., to the AUGUSTA DEVELOPMENT CO.

Portland, Maine—The New England Cold Storage Co. will build a five-story, 58x100-ft. brick addition to its plant on Commercial and Maple St.

Sanford, Maine—The Sanford Mills contemplates the construction of a three-story, 135x169-ft. factory, and a four-story, 60x374-ft. factory. The old buildings will be razed.

✚Burlington, Vt.—(Official)—The Queen City Cotton Co. has awarded the contract for the construction of a two-story, 48x323-ft. addition to its plant to the McNALLY BLDG. CO., Gardner, Mass. F. P. Sheldon & Sons, Providence, R. I., is Arch.

Boston, Mass.—The Victor Typewriting Co., 812 Greenwich St., New York, N. Y., will build a four-story, 70x750-ft. plant on Beacon St., to cost $400,000.

Chicopee, Mass.—Work will soon start on the construction of a 36x110-ft. addition to the plant of A. G. Spalding & Bros. The estimated cost is $30,000.

Chicopee Falls, Mass.—The Fisk Rubber Co. will build a six-story, 60x160-ft. brick and stone office building; a two-story service station; and a six-story, 110x810-ft. reinforced-concrete storehouse at Oak and Grove St. George B. Allen, Hartford, Conn., is Engr.

Fitchburg, Mass.—The Parkhill Mfg. Co. plans the construction of a four-story brick and steel dyeing plant. Knight C. Richmond, Providence, R. I., is Arch.

✚Framingham, Mass.—The contract for the construction of a brick carbarn for the Boston & Worcester St. Ry. Co. has been awarded to the J. W. BISHOP CO. The estimated cost is $100,000.

Lowell, Mass.—The United States Cartridge Co. will build a 50x350-ft. addition to its plant on Lawrence St., to cost $60,000.

Lowell, Mass.—The Appleton Co. will build a 100x200-ft. storehouse.

✚Springfield, Mass.—The contract for the construction of a one-story, 146x198-ft. brick garage on Columbia Terrace for the Stoddard Motor Car Co., has been awarded to EDWARD RADDING, 293 Bridge St. B. E. Geckler is Arch.

✚Springfield, Mass.—The Van Norman Machine Tool Co. has awarded the contract for the construction of a three-story, 51x88-ft. factory to L. S. WOOD, 12 Stockbridge St. The estimated cost is $12,000.

Worcester, Mass.—The H. H. Bigelow Estate will build an eight-story, 100x140-ft. industrial building on Mechanics St. E. A. Simpson, 88 Broad St., Boston, Mass., is Arch.

✚Worcester, Mass.—JOHN J. POWER has been awarded the contract for the construction of a $15,000 garage for the Logan, Swift & Brigham division of the United States Envelope Co. John P. Kingston is Arch.

Bridgeport, Conn.—The Bridgeport Brass Co. has purchased two 50x100-ft. lots, on which it contemplates the construction of storage warehouses.

Bridgeport, Conn.—The American & British Mfg. Co. plans the construction of additions to its plant.

✚Hartford, Conn.—The Hartford Cement Co. has awarded the contract for the construction of a two-story, 64x90-ft. brick warehouse on Homestead Ave., to A. J. DESSCHAMPS.

Hartford, Conn.—The Jacobs Mfg. Co. will build a three-story, 42x110-ft. brick factory on Rowe Ave. and Park St. Greenwood & Moer, 847 Main St., is Arch.

New Haven, Conn.—The Winchester Repeating Arms Co. will build a one- and two-story, 60x260-ft. concrete carpenter shop on Sheffield Ave., to cost $35,000. L. W. Robinson is Arch.

New Haven, Conn.—The New Haven Pulp & Board Co. will build a factory on its recently acquired site on Railroad Ave.

New London, Conn.—Bids will soon be received for the construction of a one-story, 75x220-ft. brick and reinforced-concrete carbarn on Montauk Ave., for the Connecticut Co. Cudworth, Woodworth & Thompson, Norwich, Conn., is Arch.

Niantic, Conn.—The Thames Dyeing & Bleaching Co. will build two factories, 80x150 ft. each, to replace the Norwich plant, which was recently destroyed by fire. John C. Geary is Pres.

Waterbury, Conn.—The Waterbury Farrell Foundry & Machine Co., Bank St., will build a three-story, 50x150-ft. brick and steel addition to its plant. Wilfred E. Griggs, 111 West Main St., is Arch.

✚Waterbury, Conn.—The Scoville Mfg. Co., 99 Mill St., has awarded the contract for the construction of a one-story, 320x600-ft. brick and reinforced-concrete factory at Hamilton Ave. and Silver St., to the SPERRY ENGINEERING CO., 82 Church St., New Haven, Conn. H. L. Thompson, 57 North Main St., is Arch. Noted May 6.

Waterbury, Conn.—Jenks & Balton, Arch., Providence, R. I., is preparing plans for a one- and two-story, 100x200-ft. brick and steel machine shop for the Waterbury Tool Co. Bids will be received about June 10.

✚Poughkeepsie, N. Y.—(Official)—Smith Bros. has awarded the contract for the construction of a two-story, fireproof building to KINGSTON & CAMPBELL. W. W. Smith, 2nd, is Mgr. Noted May 20.

Rochester, N. Y.—Samuel Sloan & Co. will build a one-story, 23x144-ft. reinforced-concrete warehouse on Exchange St., to cost $12,000.

✚Rochester, N. Y.—(Official)—JOHN E. HETZLER, 1 Masseth St., has been awarded the contract for the remodeling of the malt house of the Genesee Brewing Co. Mortensen & Co., 405 Lexington Ave., New York, N. Y., is Arch. Noted May 27.

Silver Creek, N. Y.—The H. J. Heinz Co. contemplates the construction of a salting plant.

✚Ardmore, Penn.—The Auto Car Co. has awarded the contract for the construction of a three-story, 60x96-ft. brick and concrete addition to its factory to WILLIAM R. DOUGHERTY. Stearns & Castor is Arch.

✚Hazleton, Penn.—(Official)—Ballinger & Perrot, Arch., 17th and Arch St., Philadelphia, Penn., and Marbridge Bldg., New York, N. Y., has awarded the contract to the UNITED FIREPROOFING CO., 1133 Broadway, New York, N. Y., for the construction of a one-story, 89x192-ft., brick and reinforced-concrete weave shed for the Duplan Silk Co. Noted May 20.

New Castle, Penn.—The Carnegie Steel Co. will build two hot blast stoves to cost $65,000.

New Kensington, Penn.—The United States Aluminum Co. will build an eight-story, 80x130-ft. warehouse at the foot of Tenth St. James S. Murray is Pur. Agt.

✚Philadelphia, Penn.—(Official)—The Pennsylvania Laundry Co., 44rd St., has awarded the contract for the construction of a one-story, 46x170-ft. garage and stable to ARMSTRONG & LATTA, Land Title Bldg., at $11,400. Other bids were: Charles Gilpin, $11,490; Fred A. Havens & Co., $11,895; H. H. Wehmeyer, $11,944; Lam Building Co., $12,100; Herman Voigt, $12,300. William Lowenthal, 1208 Chestnut St., is Arch. Noted May 20.

✚Philadelphia, Penn.—Charles J. Clarke has awarded the brick contract to WILLIAM R. CHAPMAN, 15th and Washington Ave., for the construction of a two-story, 123x180-ft. brick and reinforced-concrete warehouse at Washington and Delaware Ave. W. Copeland Furber, 418 Walnut St., is Engr.

Philadelphia, Penn.—Bids are being received for the construction of a six-story, reinforced-concrete brick and terra cotta factory at 25th and Locust St., for A. H. & F. H. Lippincott, Inc., 24th and Locust St. M. H. Dickinson, Empire Bldg., is Arch.

Philadelphia, Penn.—Bids are being received for the construction of an eight-story, 48x120-ft. reinforced-concrete warehouse at 253 North Broad St., for Gomery-Schwartz Motor Car Co., 253 North Broad St. Charles E. Oelschlager, Harrison Bldg., is Arch.

✚Pittsburgh, Penn.—The Columbia Ice Co. has awarded the contract to FETZER & WINGER, Bessemer Bldg., for the construction of a one-story building on Hamilton Ave., to cost $25,000. Noted Apr. 29.

Wilkes-Barre, Penn.—The Duplan Silk Co. will build a two-story, 161x240-ft. building. Noted Apr. 8.

Zelienople, Penn.—A. G. Nicholtz, Main St., contemplates the construction of a brick and hollow-tile garage, to cost $10,000.

Norfolk, Va.—Isaac Fass will build a two-story, 40x90-ft. brick cold-storage plant to cost about $25,000.

Huntington, W. Va.—Plans are being prepared by C. D. Cooley Co., Arch., Century Bldg., Pittsburgh, Penn., for the construction of a three-story, 125x150-ft. creamery and office building for the Wilson Creamery Co.

Cleveland, Ohio—The Neighbors Motor Co., 1918 Euclid Ave., plans to construct a building at Chester Ave., N. E., and East 30th St. Estimated cost, $50,000. H. F. Neighbors is Pres.

Cleveland, Ohio—The Cleveland White Metal Co., recently incorporated, plans the construction of a $75,000 factory on the Belt Line R.R. E. P. Strong, 919 Society for Savings Bldg., is interested.

Hartford City, Ind.—(Official)—The American Window Glass has halted plans for the contemplated construction work. Noted May 27.

Seymour, Ind.—The Seymour Woolen Mills plans the construction of an 80x160-ft. weaving shed, and a 60x60-ft. dye-house, both two stories and of brick and steel construction.

Detroit, Mich.—The Russell Motor Axle Co. will start work soon on the construction of a 120x120-ft. addition to its plant at North Detroit.

Chicago, Ill.—The International Tailoring Co., 212 South Market St., will build a ten-story, 116x125-ft. building at Jackson Blvd. and Peoria St., to cost about $250,000.

Oakland, Calif.—(Official)—Bids will be received until June 15 by the Pacific Coast Shredded Wheat Co., F. M. Clough, Secy. and Treas., for the construction of a plant to include a factory, boiler house, scale house, a 175-ft. chimney, transformer house, and wheat elevators. The estimated cost is $250,000. J. S. Bogart is Engr. Noted May 13.

✚San Francisco, Calif.—(Official)—The Lewis Packing Co., 950 Columbus Ave., has awarded the contract for the construction of a three-story, reinforced-concrete plant to ROUNDS & SPIVOCK. The estimated cost is $25,000. D. Kerns is Arch. Neal Harris is Mgr. Noted May 13.

FEDERAL GOVERNMENT

Repairs to Wharf—Boston, Mass.—Bids will be received until 11 a.m., June 12, by H. R. Stanford, Ch. of Bureau, Yards and Docks, Navy Dept., Washington, D. C., for making repairs to pier No. 5 at the Navy Yard, Boston.

★Rebuilding Basin Walls—Block Island, R. I.—Bids will be received until noon, June 29, by Col. John Millis, Newport, for rebuilding basin walls and repairing breakwater and harbor walls at harbor, Block Island.

★Dredging—New York, N. Y.—Bids will be received until noon, June 28, at the U. S. Engineer Office, Room 707, Army Bldg., New York, for dredging in Newtown Creek.

Buildings—New York, N. Y.—Bids will be received until 11 a.m., June 26, by H. R. Stanford, Ch. of Bureau, Yards and Docks, Washington, D. C., for building three one-story brick buildings 24x72-ft. with wings for contagious diseases at the naval hospital reservation, Navy Yard, New York.

★Breakwater—Oswego, N. Y.—Bids will be received until 11 a.m., June 23, at the U. S. Engineer Office, Buffalo, for constructing a concrete superstructure on the outer breakwater at Oswego Harbor.

★Coast Guard Station—Oswego, N. Y.—Bids will be received until 2 p.m., June 15, by Capt. E. P. Bertholf, U. S. Coast Guard, Washington, D. C., for constructing a coast guard station at Oswego.

Dock Repairs—West Point, N. Y.—Bids will be received until noon, June 30, by the Quartermaster, West Point, for making repairs and reconstructing the south dock and ferry slip.

Power Plant Equipment—Indian Head, Md.—Bids will be received until 11 a.m., July 3, by H. R. Stanford, Ch. of Bureau, Yards and Docks, Washington, D. C., for building an extension to the present building and furnishing and installing equipment in the boiler plant at the Naval Proving Ground, Indian Head.

Railroad Car—Washington, D. C.—Bids will be received until 2 p.m., June 11, by D. F. Houston, Secy., Dept. of Agriculture, Washington, D. C., for furnishing one railroad car.

★Paving—Washington, D. C.—Bids were received May 21 by the Commissioners of the District of Columbia for laying standard asphalt pavement and asphalt block paving for the fiscal year ending June 30, 1916, (a) laying standard asphalt paving (2½-in. asphalt surface, 2-in. binder before compression) upon 6-in. concrete base; (b) laying vitrified brick block with 6-in. concrete base, (c) laying standard asphalt paving, as in (a) on 5-in. concrete base, (d) laying vitrified block on 5-in. concrete base, (e) 2-in. asphalt block paving on 6-in. concrete base, (f) 2-in. asphalt block paving on 5-in. concrete base, (g) allowance for Occoquan stone furnished by District Government, as follows: Eastern Paving Co., Philadelphia, Penn., (a) $1.69, (b) $1.34, (c) $1.64, (d) $2.29, (g) $0.75; Warner-Quinlan Asphalt Co., Syracuse, N. Y., (a) $1.49, (b) $1.23, (c) $1.43, (d) $1.15, (g) $0.90; Union Paving Co., Baltimore, Md., (a) $1.67; (b) $1.33, (c) $1.59, (d) $1.25; (g) $0.84; Cranford Paving Co., Washington, D. C., (a) $1.66, $1.77, (b) $1.40, (c) $1.62, $1.67, (d) $1.62, (g) $0.70; Washington Asphalt Block & Tile Co., Washington, D. C., (e) $1.91, (f) $1.61, (g) $0.80. Noted Apr. 29.

Sewer—Washington, D. C.—One bid was received May 25 by the Commissioners of the District of Columbia for the construction of Section 7 of Rock Creek main interceptor, in Rock Creek Park, crossing Rock Creek. Warren F. Brenizer Co., 141 Q St., N. W., Washington, ordinary excavation, $3; concrete masonry "B", $10, vitrified brick masonry, $25, sewer brick maconry, $15, laying 54-in. c.-i. pipe crossing Rock Creek, $27.50 per lin.ft.

★Sulphate of Alumina—Washington, D. C.—Bids will be received until noon, June 26, by the U. S. Engineer Office, Room 305 Southern Bldg., Washington, for furnishing 300 tons, 25% more or less, sulphate of alumina.

★Coal—Wilmington, N. C.—Bids will be received until noon, June 28, at the U. S. Engineer Office, Wilmington, for furnishing 13,000 tons of bituminous coal.

★Cement—Wilmington, N. C.—Bids were received May 26 by Maj. H. W. Stickle for portland cement as follows: Alpha Portland Cement Co., Easton, Penn., (a) $32,700, (b) $45,980, (c) $23,100; Grant Portland Cement Co., Philadelphia, Penn., (a) $37,620, (b) $49,059, (c) $25,960; Coplay Cement Mfg. Co., Philadelphia, Penn., (a) $25,740; Caralina Portland Cement Co., Charleston, S. C., (a) $28,160, (c) $29,900; Atlas Portland Cement Co., New York, N. Y., (b) $48,400, (c) $25,300 and the Lehigh Portland Cement Co., Allentown, Penn., (a) $37,400, (b) $48,840 and (c) $25,300. Noted Apr. 29.

★Crushed Stone—Wilmington, N. C.—Bids were received May 26 by Maj. H. W. Stickle for furnishing crushed stone as follows: C. P. Lathrop & Co., Richmond, Va., $43,492; Virginia Sand & Gravel Corporation, Norfolk, Va., $39,260; S. E. Morris Co., Norfolk, Va., $45,571; Robert G. Lassiter, Raleigh, $41,487 or $40,503 and Weston & Brooker Quarry Co., Columbia, S. C., $42,376. Noted Apr. 29.

✚Post Office—Laurel, Miss.—The contract has been awarded to JOHN G. UNKEFER & CO., Minerva, Ohio, at $68,050, for constructing a post office at Laurel. Noted Apr. 15 and May 27.

Levee Work—Vicksburg, Miss.—Bids will be received until 11 a.m., June 5, by the Third Mississippi River District, post-office box 404 Vicksburg, for constructing about 660,000 cu.yd. of levee.

★Breakwater—Marblehead, Ohio—Bids were received May 20 for constructing a breakwater at the Coast Guard station, Marblehead as follows: Coast & Lakes Contracting Corporation, 41 Broad St., New York, N. Y., $8350; Great Lakes Dredge & Dock Co., Cleveland, $13,038; Freyensee Bros., Sandusky, $10,655 and Lake Shore Contracting Co., Cleveland, $8100. Noted Apr. 22.

★Excavation—Detroit, Mich.—Bids will be received until noon, June 15, by Lieut.-Col. Mason M. Patrick, Federal Bldg., Detroit, for excavation of earth and rock at the U. S. power plant tail race, St. Marys River.

★Lock Improvement—Sault Ste. Marie, Mich.—Bids were received May 24 by Lieut.-Col. Mason M. Patrick, Detroit, for lock improvement at the Fourth Lock as follows: Oscar Daniels Co., Unity Bldg., Chicago, Ill., $1,010,480; Maryland Dredging & Contracting Co., Fidelity Bldg., Baltimore, Md., $1,028,880; Greiling Bros. Co., Green Bay, Wis., $1,048,180; Grant Smith & Co., St. Paul, Minn., $1,143,510; T. A. Gillespie Co., Pittsburgh, Penn., $1,146,190; James O. Heyworth, Harvester Bldg., Chicago, Ill., $1,162,849; Cook Construction Co., Gilfillan Bldg., St. Paul, Minn., $1,178,550; Thomas Harmon Co., Railway Exchange Bldg., St. Louis, Mo., $1,197,650; Larkin & Sangster, Seneca Falls, N. Y., $1,231,060; Dravo Contracting Co., Pittsburgh, Penn., $1,241,820; Bates & Rogers Construction Co., Old Colony Bldg., Chicago, Ill., $1,261,420; Great Lakes Dredge & Dock Co., Chicago, Ill., $1,289,780 and Cleveland & Sons Co., Brockport, N. Y., $1,410,820. Noted Apr. 15 and 29.

★Steel—Sault Ste. Marie, Mich.—Bids will be received until noon, June 30, at the U. S. Engineer Office, Detroit, Mich., for furnishing about 325 tons of steel for the Fourth lock, Sault Ste. Marie.

Post Office—Beardstown, Ill.—Bids will be received until 3 p.m., July 9, by James A. Wetmore, Act. Superv. Arch., Treasury Dept., Washington, D. C., for constructing complete the U. S. post office at Beardstown.

Post Office—La Salle, Ill.—Bids were received May 26, by the Acting Supervising Architect, Treasury Dept., Washington, D. C., for the construction of a post office at La Salle, as follows: Rogers & Kaiser, Chicago, (a) $75,767, (b) $78,767; Westchester Engineering Co., White Plains, N. Y., (a) $73,900, (b) $80,000; George A. Shaul, Seneca, Kan., (a) $71,958; Callahan-Mandl Co., Chicago, (a) $68,611, (b) $70,000; Nicholas Miller, Massillon, Ohio, (a) $74,194, (b) $75,298; George W. Stiles Construction Co., Chicago, (a) $69,342; Thomas W. Cissel, Wooster, Ohio, (a) $72,767, (b) $75,767; McManus & Tarnoski, St. Paul, Minn., (a) $74,800; James Devault, Canton, Ohio, (a) $79,600, (b) $84,000; Colonial Construction & Supply Co., Charlottesville, Va., (a) $69,398, (b) $73,259; King Lumber Co., Charlottesville, Va., (a) $79,800, (b) $90,000; Charles W. Gindele Construction Co., Chicago, (a) $67,000, (b) $71,800; J. P. Cullen Construction Co., Janesville, Wis., (a) $73,849; Clarke Construction Co., Danville, (a) $71,817, (b) $75,469; Barnes Bros., Logansport, Ind., (a) $71,910, (b) $76,915; W. G. Carter Co., Chicago, (a) $74,459, (b) $78,459; Hiram Lloyd Building & Construction Co., St. Louis, Mo., (a) $73,191, (b) $76,191; R. P. Farnsworth & Co., Owensboro, Ky., (a) $75,000, (b) $79,000; W. H. Fissell & Co., New York, N. Y., (a) $70,656, (b) $75,656; Balkin Construction Co., Chicago, (a) $66,$53 and Frank L. Johnson & Co., Duluth, Minn., (a) $77,996. Noted Apr. 22.

✚Building—Milwaukee, Wis.—The contract for the construction of a coast guard station at Milwaukee, has been awarded to H. J. PAYNES, Milwaukee, at $24,800. Noted May 13.

Remodeling Post Office—Des Moines, Iowa—Bids will be received until 3 p.m., July 8, by James A. Wetmore, Act. Superv. Arch., Treasury Dept., Washington, D. C., for repairing and remodeling the U. S. post office and court house at Des Moines. Noted Apr. 1 and 22.

★Reclamation Work—Great Falls, Mont.—Bids will be received until 2 p.m., July 1, by A. P. Davis, Ch. Engr., U. S. Reclamation Service, Great Falls, for constructing canals on the Sun River Project.

✚★**Dike and Revetment**—Glasgow, Mo.—The contract has been awarded to DeWITT & THOBE, Glasgow, at $12.95 per lin.ft. for dike and $8.34 for revetment. Noted Apr. 29.

★**Dike**—Napoleon, Mo.—Bids were received May 20 by Lieut.-Col. Herbert Deakyne, Kansas City, for constructing about 5900 ft. of timber dike on the Missouri River from DeWitt & Thobe, Glasgow, at $13.48 per lin. ft., and Norton Bros. & Kennedy, Kansas City, at $13.98 per lin.ft., Noted Apr. 29.

Levee Work—St. Louis, Mo.—Bids will be received until 11 a.m., June 17, by the Secretary, Mississippi River Commission, International Life Bldg., St. Louis, for constructing about 175,000 cu.yd. of earthwork in the East Side levee district.

Radio Towers—Point Isabel, Tex.—Bids were received May 29 by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for the construction of two 300-ft. radio towers at the U. S. Naval Radio Station, Point Isabel, as follows: (a) price per lb. of structural steel erected, (b) foundations: American Gas Accumulator Co., Philadelphia, Penn., (a) $0.0661; G. H. Williams, Erie, Penn., (a) $0.08644; Llewellyn Iron Works, Los Angeles, Calif., (a) $0.0616; Pittsburgh-Des Moines Steel Co., Pittsburgh, Penn., (a) $0.057, (b) $5660; Henry Monk, Pensacola, Fla., (a) $0.0675, (b) $8680; Friedman & Rendle, Brownsville, Tex., (b) $6009; S. S. Dodds, San Benito, Tex., (b) $6240; F. H. Williams & C. S. Hobbs, Brownsville, Tex., (b) $13,214; Blodgett Construction Co., Galveston, Tex., (b) $7970; Milwaukee Bridge Co., Milwaukee, Wis., (a) $0.0584; Chicago Bridge & Iron Co., Chicago, Ill., (a) $0.0537; Midland Bridge Co., Kansas City, Mo., (a) $0.0544; (b) $5600, (all or none); Nashville Bridge Co., Nashville, Tenn., (a) $0.0598; Penn Bridge Co., Washington, D. C., (a) $0.063; American Bridge Co., Baltimore, Md., (a) $0.0394, not erected. Noted Apr. 29.

Building—Chilocco, Okla.—Bids were received May 20 by the Commissioner of Indian Affairs, Washington, D. C., for constructing an addition to the school at the Chilocco Indian School as follows: John M. Fuller, Winfield, Kan., $10,965; John O. Brown, Arkansas City, Kan., $11,519; Hetzel & Winget, Los Angeles, Calif., $16,800.

✚**Building**—Choctaw, Okla.—Contracts have been awarded for constructing buildings at the Choctaw Sanatorium as follows: Frame hospital, W. D. LOVELL, Minneapolis, Minn., $34,250; frame quarters, no award; laundry, no award; power house, HORTON & SMITH, Montezuma, Ia., $5424; water and sewer system, to HORTON & SMITH, $7798; electric lighting, PEABODY ELECTRIC CO., Muskogee, $1532; 20 camp quarters, no award. Noted Apr. 1.

★**Canal Work**—Payson City, Utah—The low bidder for the excavation for a canal at Payson City was the Morrison-Knudson Co., Boise, Idaho, at $38,950. Noted Apr. 22.

★**Bridge**—Topock, Ariz.—Bids will be received until 2 p.m., June 19, by Cato Sells, Comr. of Indian Affairs, Washington, D. C., for constructing a steel highway bridge across the Colorado River. See item under "Bridges," Needles, Calif.

★**Post Office**—Everett, Wash.—The contract has been awarded to HENRIKSON & CO., Alaska Bldg., Seattle, at $111,519, for constructing the U. S. post office at Everett. Noted Feb. 18 and Mar. 25.

Torpedo Storehouse—Keyport, Wash.—Bids were received May 29 by the Bureau of Yards and Docks, Navy Dept., Washington, D. C., for the construction of a torpedo storehouse for the Naval Station, Keyport, Wash., as follows: Hans Pedersen, $43,300; Eckmann & Mowat, $42,650; Chamberlain Construction Co., $42,945; Sound Construction & Engineering Co., $40,500; Martin & Dugan, $36,513; A. W. Quist Co., $46,207; Finne & Jarde, $42,185; Pearson Construction Co., $37,925; Butler Contracting Co., $39,900; Charles H. Schaar, $42,240; Burke Ward, $40,990; Erickson & Larson, $37,246; Pacific States Construction Co., $42,790; Above bidders are of Seattle, Wash., W. N. Concannon, San Francisco, Calif., $47,373; McHugh & Creelman, Tacoma, Wash., $45,950; Lent & Benbennick, Bremerton, Wash., $44,060 and John Wallin, Tacoma, Wash., $45,653. Noted May 6.

Cement—Seattle, Wash.—Bids will be received until 9 a.m., June 10, by Col. George B. Davis, Depot Quartermaster's Office, Seattle, for furnishing and delivering at Seattle or Honolulu, H. T., 12,000 bbl. of American portland cement.

Sewers—San Diego, Calif.—Bids were received May 29, by the Bureau of Yards and Docks, Nevy Dept., Washington, D. C., for the sewer and water systems at the Naval Radio Station, San Diego, Calif., as follows: Mesmer & Rice, Los Angeles, $12,513; Holland Construction Co., San Diego, $12,882; C. H. Julian, San Diego, $13,924; Eggert & Eukropina, Los Angeles, $16,420; Earling Rohde, San Diego, $15,665; Isabell Construction Co., San Diego, $12,885; Power Equipment Co., San Francisco, $10.650. Noted Apr. 15 and May 20.

Boiler House and Boilers—San Francisco, Calif.—Bids will be received until noon, June 22, at the office of the Supervising Superintendent of Construction, Room 403, U. S. Post Office Bldg., for the erection of an addition to the boiler house and the installation of a new boiler at the U. S. Marine Hospital Station. J. W. Roberts is Superv. Supt.

Miscellaneous Supplies—Panama — Bids will be received until 10:30 a.m., June 5, by Maj. F. C. Boggs, Gen. Pur. Agt., Panama Canal, Washington, D. C., for furnishing miscellaneous supplies for the Panama Canal.

Miscellaneous Supplies—Panama — Bids will be received until 10:30 a.m., June 7, by Maj. F. C. Boggs, Gen. Pur. Agt., Panama Canal, Washington, D. C., for furnishing miscellaneous supplies for the Panama Canal.

Miscellaneous Supplies—Panama—Bids will be received until 10:30 a.m., June 11, by Maj. F. C. Boggs, Gen. Pur. Agt., Panama Canal, Washington, D. C., for furnishing miscellaneous supplies.

MISCELLANEOUS

Dredging—Boston, Mass.—The following bids were received on May 25 by the State Harbor and Land Commission for dredging at Menamsha Harbor: John H. Letteney, Boston, 43c. per cu.yd. (earth); $10 per cu.yd. (boulder); John R. Burke, Boston, 38.7c.; $5. For dredging at Gloucester Harbor: John H. Gerrish, Boston, 49c. per cu.yd. (earth); 49c. per cu.yd. (small boulders); $10 per cu.yd. (large boulders); Bay State Dredging Co., Boston, 28c.; $6; $13; Eastern Dredging Co., Boston, 33c.; $9.50; $19.97; Charles M. Cole, Fall River, 35c.; 35c.

Earthwork and Dredging—Boston, Mass.—Bids will be received until June 9 by the State Harbor and Land Commissione for the construction of an earth dike at Holyoke, also for dredging 9500 cu.yd. material at Mill River, Gloucester. William F. Williams is Ch. Engr.

Fire Station and Motor Fire Apparatus—Palmer, Mass.—The city plans to spend $10,000 for the construction of a fire station and for the purchase of motor fire apparatus.

★**Greenhouses**—Albany, N. Y.—(Official)—Bids will be received by the Trustees of Public Buildings, Capitol Bldg., until 4 p.m., June 15, for the construction of greenhouses at the New York State Executive Mansion. Lewis F. Pilcher, Capitol, is State Arch.

Canal Work—Albany, N. Y.—A bill providing for the issue of $27,000,000 in canal bonds has been approved by Governor Whitman. The issue will be submitted to the voters at the next election.

✚**Subway**—Buffalo, N. Y.—The contract for the construction of a subway under the Pennsylvania R.R. at Lord and Smith St. has been awarded to the LATHROP, SHEA & HENWOOD CO., Ellicott Sq. Bldg., Buffalo, at $71,988. Noted Apr. 29.

★✚**Wharf**—Dunkirk, N. Y.—The contract for the construction of a public wharf has been awarded to the D. L. TAYLOR CO., INC., Medina, at $67,844. Noted Apr. 22.

Pier—New York, N. Y.—(Borough of Brooklyn)—(Official)—Bids will be received by R. A. C. Smith, Comr. of Docks and Ferries, Pier A, Battery Pl. (Borough of Manhattan), until noon, June 11, for building a pier at the foot of 29th St., Brooklyn.

Subway Station—New York, N. Y.—(Borough of Brooklyn)—The following are the unofficial bids received by the Public Service Commission, 154 Nassau St. (Borough of Manhattan), for the construction of the station finish of the Fourth Ave. subway, a part of the Broadway-Fourth Ave. Rapid Transit R.R. from center of Flatbush Ave. extension to a point on Fourth Ave., about 150 ft. south of 42d St.: C. L. Dooley, Inc., $45,950; Marble Arch Co., $42,000; Station Construction Co., $40,689; Charles Meade Co., $42,219; Simon Russek, $41,361; D. C. Serber, 1123 Broadway, $40,383. Noted May 27.

★✚**Subway**—New York, N. Y.—(Borough of Brooklyn)—The Public Service Commission has awarded the contract for the construction of Section No. 2 of Route No. 49, a part of the Culver Rapid Transit R.R. in Brooklyn, to the OSCAR DANIELS CO., Woolworth Bldg., at $863,775. Noted Apr. 29 and May 20.

✚**Motordrome**—New York, N. Y.—(Borough of Brooklyn)—(Official)—The contract for constructing the large two-mile motordrome for the Sheepshead Speedway Corporation, has been awarded to the COAST & LAKE CONTRACTING CORPORATION, 41 Broad St., New York, N. Y. This contract also includes the construction of a grandstand. The steel contract was placed with the LACKAWANNA STEEL CO., Lackawanna, N. Y. About 4000 tons of material is involved. Work has already started and is under the supervision of Blaire H. Miller, Engr. Henry F. Hornbostel, 63 William St., is Arch. Everard Thompson, Whitehall Bldg., New York, N. Y., is Gen. Mgr. Noted Apr. 29.

Trailers—New York, N. Y.—(Borough of Manhattan)—(Official)—Bids received by Marcus M. Marks, Borough Pres., for furnishing and delivering eight trailers were from George B. Marx, 198 Newell St. (Borough of Brooklyn), at $6320, and Watson Wagon Co., at $6538. Noted May 20.

✚**Steamers**—New York, N. Y.—The contract for the construction of three steamers for the Clyde Steamship Co., New York, has been awarded to the GREAT LAKES ENGINEERING WORKS, Detroit, Mich., at an estimated cost of $600,000.

✚**Improvements to Coal Pockets**—New York, N. Y.—(Borough of Manhattan)—(Official)—Plans are being prepared by Charles Houchin Higgins, Engr., 30 Church St., for coal hoisting machinery, screens, head house, rescreening pockets, office and scales, in connection with coal handling plans, to be erected by O. H. Perry & Son, Inc., at foot of East 19th St. The contract for the main pockets has been recently awarded to GENERAL CONTRACTING & ENGINEERING CO., 29 Broadway, New York.

Improvements to Market—New York, N. Y.—(Borough of Manhattan)—(Official)—Bids will be received by Charles H. Higgins, Engr., 30 Church St., New York, until June 14, for installing fixtures and constructing stalls, etc., at the Washington market. The work included is that part to be done by the tenants, before moving into the remodeled market.

Lamp Posts—New York, N. Y.—(Borough of Manhattan)—(Official)—The following are the bids received by the Department of Water Supply, Gas and Electricity, Municipal Bldg., for furnishing and delivering 1500 c.-i. lamp posts, with steel shafts: William Messer Co., $89,580; Mt. Carmel Iron Works, $54,750; J. L. Mott Iron Works, 118 Fifth Ave., New York, $26,580; Western Electric Co., $47,250; Morris Iron & Steel Co., $31,740 (informal); J. Fox & Co., $29,070.

Fire Escapes—New York, N. Y.—(Borough of Manhattan)—The Board of Estimate has authorized the issue of $10,000 in corporate stock for the erection of fire escapes on the Research Laboratory Bldg. and the Willard Parker Hospital.

✚**Flood Protection**—Rochester, N. Y.—(Official)—The following are the bids received by the Department of Engineering for deepening the Genesee River from the Central Ave. Dam to a point about 200 ft. south of the Erie Canal Aqueduct: LATHROP, SHEA & HENWOOD CO., $315,200 (awarded contract); R. T. Ford Co., $319,200; M. H. Ryston, $336,640; T. A. Gillespie Co., $342,120; Thomas Holahan, $345,000; Haller & Shepard, $349,600; Houston & Barnard, $358,100; Cleveland & Sons Co., $361,900; Myers & McWilliams, $372,200; Buffalo Dredging Co., $377,10; Whitmore, Rauber & Vicinus, $378,100; Fitch & Douglass, $392,600. E. A. Fisher is Consult. Engr. Noted Apr. 8.

✚**Crushed Stone**—Cliffside Park, N. J. (Cliffside post office)—The Board of Council has awarded the contract to the CLIFFSIDE TRAP ROCK CO., Cliffside Park, for trap rock as needed throughout the year, at $1.17 per cu.yd.

✚**Iron Stairways**—Jersey City, N. J.—The Public Service Ry. Co. has awarded the contract to the FAGAN IRON WORKS, Hoboken, N. J., for a new iron stairways to replace the stairways leading to the elevated structure at Hoboken Ave., Fleet St., Beacon Ave., Jefferson Ave., Ravine Ave., Jersey City Heights and Willow Ave., Bloomfield St. and Washington St., Hoboken.

Fire Hose—Jersey City, N. J.—Bids will be received until 2 p.m., June 10, by the Board of Commissioners for about 8000 ft. of 4-ply, solid multiple, woven-cotton, rubberlined fire hose. M. I. Fagen is City Clk.

Grand Stand—Newark, N. J.—Bids will be received until June 8 by the Essex County Park Commission for the construction of a grandstand at Weequahic Park, including structural steel, masonry, carpentry and metal work. Plans are on file at the office of William P. Field, Engr., 763 Broad St. A. Church is Secy. of the Board. Noted May 20.

Dike—New Brunswick, N. J.—All bids received for building 6000 ft. of dike along the Hackensack River have been rejected. Thos. J. Headler, Entomology Bldg., New Brunswick, is Dir.

Motor Fire Apparatus—West New York, N. J.—Bids will be received by the Town Council until June 8 for one 75-hp. hook and ladder, one triple combination chemical pump and hose-wagon and one motor-driven hose and chemical wagon. Noted May 20.

Mausoleum—Allentown, Penn.—Plans are being prepared by Charles W. Grossart, Arch., Allentown, for a mausoleum containing 330 vaults to be erected in Fairview Cemetery. There will also be a chapel and a caretaker's residence on the property. F. C. H. Schweyer, Allentown, is interested.

Bulkhead—Philadelphia, Penn.—The City Council has authorized the Director of Wharves and Ferries to spend a portion of the $250,000 appropriated by the state in constructing a wooden bulkhead along the east bank of the Schuylkill River.

★**Tunnel**—Pittsburgh, Penn.—(Official)—Bids well be received by the County Commissioners until 1:30 p.m., July 12, for the construction of Highway Tunnel No. 1, extending from the south side of East Carson St. to a point on Warrington Ave. near Boggs Ave. Hyatt M. Cribbs is County Controller.

Motor Fire Apparatus—Scranton, Penn.—The City Council has decided to issue bonds for the purchase of fire apparatus to cost about $18,000. Ellsworth Kelly is City Clk.

Coal Pier—Baltimore, Md.—The Baltimore & Ohio R.R. Co. is having tentative plans prepared for the construction of a 700-ft. coal pier at Curtis Bay. The estimated cost is $1,000,000.

Railroad Car—Washington, D. C.—See item under "Federal Government Work."

Drainage—Bartow, Fla.—The city plans to issue $256,000 in drainage bonds.

Sheds—Jacksonville, Fla.—Bids will be received until noon, June 8, by Capt. F. W. Bruce, Engr., Port Commission, for the erection of steel wharf sheds on the municipal piers. Noted May 6.

✚**Drainage**—Donaldsonville, La.—According to press reports, the contract for drainage work in the Bayou Conway Drainage District, has been awarded to PICARD, BUCKMASTER & WEIL, at 6.49c. per cu.yd. Noted Apr. 8.

✚**Drainage**—Estherwood, La.—The contract for the construction of a drainage system in the Fifth Ward, Arcadia Parish, has been awarded to ZIGLAR DREDGE BOAT CO., Jennings, La., at about 8c. per cu.yd. About 300,000 cu.yd. of material is to be removed.

Rat-Proofing—New Orleans, La.—The New Orleans Dock Board has received a loan of $105,000 for the purpose of ratproofing the Julia St. wharves.

Earth Embankment—New Orleans, La.—(Official)—Bids will soon be called by the city for the construction of an earth embankment about 10 ft. high, 30 in. wide across the top, 60 in. across the bottom and 51,000 lin.ft. long. It will stretch across the marshes and is for the purpose of creating a foundation for storm protection. W. J. Hardee is City Engr.

★**Retaining Wall**—Cincinnati, Ohio—Bids will be received by the Commissioners of Hamilton County until noon, June 18, for constructing concrete retaining wall in Cooper Creek, on the west side of Reading Pike, opposite Cooper Ave. in Sycamore Township. Albert Reinhardt is Clk.

Greenhouses—Columbus, Ohio—Bids will be received by Carl E. Steeb, Secy. Bd. of Trustees, Ohio State University, Columbus, until noon, June 15, for the construction of greenhouses for the horticulture and forestry buildings. Specifications may be obtained from Joseph N. Bradford, University Arch.

Levee—Piqua, Ohio—It is reported that bids will be received by the Clerk of the County Commissioners until June 4 for constructing the Shawnee levee. The estimated cost is $35,000.

Motor Fire Apparatus—Muncie, Ind.—The City Council has appropriated $14,000 for the purchase of a triple combination motor-driven engine and a tractor for 30-ft. aërial tower. John R. Kelly is City Clk.

Ditch—West Point, Ind.—Bids will be received by Pa[illegible] Ward, Drainage Comr., until June 12 for the construction [illegible] a ditch.

Channel Work—Chicago, Ill.—According to press report[illegible] bids will soon be received for flattening the slopes of Nort[illegible] Shore Channel between Wilmette pumping station and We[illegible] Railroad Ave.

Piers, Etc.—Evanston, Ill.—An election will be held o[illegible] June 7 for the purpose of voting on the question to issu[illegible] $50,000 in bonds for constructing piers, breakwater, and[illegible] retaining walls.

Electric Fixtures—Springfield, Ill.—(Official)—Bids will be received by Frank D. Whipp, Fiscal Superv. Bd. of Administration, Springfield, until 3 p.m., June 21, for furnishing and installing electric fixtures at a number of state institutions.

Building Equipment—Milwaukee, Wis.—Sealed bids will be received by L. G. Widule, County Clk., until 10 a.m., June 7, for furnishing the equipment for the Milwaukee County Tuberculosis Sanatorium. The following gives a partial list of the materials required: Steel lockers, pipe covering, vacuum cleaners, hospital equipment, kitchen utensils, china, glassware and silver, refrigerators, beds, shades, screens, cooking apparatus, sterilizers, laundry equipment. G. L. Bellis is Supt. The estimated cost is $650,000.

Ditches—Three Lakes, Wis.—(Official)—Bids will be received by the Secretary, Three Lakes Drainage District, until June 25 for constructing about 11 miles of open ditches, requiring about 150,000 cu.yd. earth excavation.

✚**Ditch**—Litchfield, Minn.—The contract for constructing Ditch No. 36 has been awarded to DUFFY & McGRAW, Litchfield, at $16,916. A. O. Palmguist is County Audr. Noted May 20.

Dredge—Kansas City, Kan.—Bids will be received until 10 a.m., June 7, by P. J. Broll, Secy., Kaw Valley Drainage District, for constructing and delivering one hydraulic dredge.

Improvement to Creek—Kansas City, Mo.—The City Council has made an appropriation of $25,000 for improving Turkey Creek.

Earthwork—St. Louis, Mo.—Bids will be received until June 17 by the Secretary, Mississippi River Commission, 1311 International Life Bldg., St. Louis, Mo., for constructing about 175,000 cu.yd. of earthwork in East Side Levee and Sanitary District.

Levee—Caldwell, Tex.—Bids will be received until June 26 by R. S. Newsom, Chn., Commissioners Burleson County Improvement District, for levee work. The contract involves the construction of about 360,000 cu.yd. of earthwork also several drain ditches. J. C. Nagle, Austin, is Engr.

✚**Pier**—Galveston, Tex.—The contract for the construction of a pier for the Galveston Wharf Co. has been awarded to the STONE & WEBSTER ENGINEERING CORPORATION, Boston, Mass. Ford, Bacon & Davis, New Orleans, La., is Engr. Noted May 6.

Drainage—Harper, Utah—It is reported that the County Commissioners, Brigham City, have been petitioned to create a drainage district. David Rosenbaum and W. H. Barnard are among those interested.

Drainage—Bellingham, Wash.—Charles E. Lind, Bellingham, at $10,544, submitted low bid for digging the main ditch and three laterals for Drainage District No. 9, Whatcom County.

Drainage—Cheney, Wash.—It is reported that bids will be received until June 10 for the reclamation of about 900 acres of lake bed. The work involves the construction of about 14 miles of ditches. Ingersoll & Bugby, Old National Bank Bldg., Spokane, is Engr.

Dikes—Everett, Wash.—Bids will soon be called by M. Weatherbee, County Audr., for constructing dikes in the Grand Marsh District.

Drainage—North Yakima, Wash.—Bids will be received by the County Commissioners until June 11 for drainage work in Districts Nos. 4, 13 and 24. Charles E. Barrett is County Audr.

Drainage—Washougal, Wash.—Plans for the reclamation of 2000 acres of bottom land near this city are being prepared by F. E. Bethea, Washougal. The work will cost $25,000, and includes drainage system and the construction of dikes.

Mausoleum—Portland, Ore.—A mausoleum to cost about $65,000 will be built on East 14th St. by the Portland Mausoleum Co., from plans prepared by Lawrence & Holford, Arch., Portland. The structure will be of reinforced concrete and marble, and will contain 1000 crypts. Bids will soon be asked for materials and construction.

Dock—St. Johns, Ore.—Permission to construct a dock, costing about $45,000, has been granted by City Council to the Star Sand & Gravel Co. The structure will be 360 ft. long and 150 ft. wide, and will be built between Richmond and John St.

Jetty—Suislaw, Ore.—The Port Commissioners of Suislaw plan to extend the north and south jetty at an estimated cost of $230,000. L. B. Cushman is Chn.

✚**Pier**—La Jolla, Calif.—The contract has been awarded to the MERCEREAU BRIDGE & CONSTRUCTION CO., Pacific Electric Bldg., Los Angeles, at $24,180, for constructing a 400-ft. reinforced-concrete pier for the State Biological station.

✚**Dredge**—Marysville, Calif.—The contract for constructing the dredge for the Marigold Gold Dredging Co. has been awarded to the UNION IRON WORKS, San Francisco, Calif., at about $400,000.

✚**Tank Steamer**—San Francisco, Calif.—The Union Oil Co. has awarded a contract for the construction of an oil tank steamer to the UNION IRON WORKS, at about $1,000,000.

Pier Extension—Cap Chat, Que.—Bids will be received by R. C. Desrochers, Secy., Dept. of Pub. Wks., until June 18, for constructing an extension to training pier at Cap Chat.

Boat Harbor—Ottawa, Ont.—It is reported that bids will be received until June 4 by R. C. Desrochers, Secy., Dept. Pub. Wks., for constructing a boat harbor at North Lake, Kings County.

Crane—Ottawa, Ont.—Bids will be received by G. J. Desbaratas, Deputy Minister of Naval Service, Ottawa, until July 1 for furnishing one 30-ton steam wharf crane of the derricking jib type.

Breakwater—Ottawa, Ont.—Bids will be received by the Department of Public Works, Ottawa, until June 14 for the construction of a breakwater at Petite River Est, Gaspe County, Que.

River Improvement—Ottawa, Ont.—The government plans to raise the level of the St. Lawrence River by a system of retaining dikes and the damming of subsidiary channels. A report on this work has been prepared by E. E. Haskell, Dean of the College of Civil Engineering, Cornell University; V. W. Forneret, Engineer of the St. Lawrence Ship Channel, and W. J. Stewart, Hydrographer. Dams will be of rock-filled construction. The work will cost about $487,000.

Jetty—New Westminster, B. C.—The contract for the second unit of the Fraser River main channel jetty at Stevenson, near New Westminister, has been awarded to the MARSH HUTTON POWERS CO., LTD., Vancouver, B. C., at about $400,000.

BUILDINGS

Other items relative to Building Construction will be found under the following headings: "Industrial Works;" "Federal Government Work" and "Miscellaneous."

Manchester, N. H.—The contract will soon be awarded for the construction of a temple for the Manchester Lodge of Elks. The estimated cost is $80,000.

Montpelier, Vt.—The Governor has appointed a commission to build a $150,000 state library. Horace F. Graham is a member of the Comn.

Boston, Mass.—The Fidelity Trust Co. will build an 11-story bank building at State St. and Chatham Row, to cost $600,000.

Boston, Mass.—Bids will be received until July 1 by Richard A. Lynch, Supt. of Dept. of Pub. Bldgs., for the construction of a combined police station and school administration building on Tremont St. J. McGinniss, 16 Arlington St., is Arch. Noted Apr. 1.

✚Boston, Mass.—The NORCROSS BROS. CO. has been awarded the contract for the construction of a five-story, 109x119-ft. brick and stone administration building for the Massachusetts General Hospital. The estimated cost is $150,000. Noted May 20.

Boston, Mass.—J. Shapiro, 92 White St., will build a brick theater on Bennington St., to cost about $200,000.

✚Boston, Mass.—The contract for the construction of a 100x150-ft. reinforced-concrete moving picture theater at 415 Washington St., for the Moving Picture Co. of Massachusetts, has been awarded to the FLEISCHMAN CONSTRUCTION CO., 7 West 45th St., New York, N. Y. The estimated cost is $250,000. Thomas W. Lamb, 644 Eighth Ave., New York, N. Y., is Arch.

Brookline, Mass.—An eight-story, 85x103-ft. brick and stone apartment house will be built on Beacon St. for Charles Newhall, 18 Tremont St. The estimated cost is $300,000. Harland A. Perkins, 44 Broomfield St., is Arch.

✚Chicopee, Mass.—The Board of Education has awarded the contract for the construction of the high school to the SARUBBI CONSTRUCTION CO., Springfield, Mass., at $50,874. Noted Apr. 1 and 92.

Danvers, Mass.—The Town of Danvers plans the construction of a high school building. J. Anderson Lord, 123 Liberty St., is Clk.

✚Holyoke, Mass.—The contract has been awarded by Geo. P. B. Alderman to LOUIS CARREAN & SON, for the construction of a six-story, fireproof office and store building. It will cost between $75,000 and $100,000.

✚Milford, Mass.—The contract for the construction of a nurses' home at the Milford Hospital has been awarded to GASCOGNE & GODDARD, 201 Devonshire St., Boston, Mass. The estimated cost is $75,000.

Milford, Mass.—Walter L. Collins and Wendell T. Phillips have been retained as architects for the $60,000 grammar school.

✚Wellesley, Mass.—J. W. BISHOP & CO., Worcester, Mass., has been awarded the contract for the construction of an addition to the Carnegie Library at Wellesley College, at approximately $100,000.

West Springfield, Mass.—(Official)—Bids will be received until June 3 by Fowle & Hardwig, Arch., Westfield, Mass., for the construction of a $100,000 addition to the high school. J. R. Fausey, Town Hall, is Supt. of Schools. Noted May 20.

Newport, R. I.—Revised plans for the John Clark School, to be built on Mary St., have been approved by the Aldermen and bids will soon be called for. Thomas Weaver is Arch.

Olneyville, R. I.—(Providence post office)—A 100x150-ft. brick school will be built for St. Anthony's Parish. Rev. George W. Brown is pastor. John F. O'Malley, 75 Westminster St., Providence, is Arch.

Providence, R. I.—The Knights of Columbus will build a $200,000 building. C. Woodbury Gorman is Pres. William G. Richards is Arch.

Providence, R. I.—A homeopathic hospital will be constructed on Sessions St., to cost about $250,000. William F. Goodman is Treas.

✚Bridgeport, Conn.—The contract for the construction of an addition to the county courthouse on Golden Hill St. has been awarded to DOWLING & BOTTOMLY, 43 Randall Ave., at $123,000. Other bidders were: Edwin Outwater, New York, $143,860; Tracey Bros., Waterbury, $145,588; John T. Brady, New York, $146,679; E. Whitehead, Worcester, Mass., $147,696; T. J. Pardy Co., Bridgeport, $149,266; Harris Construction Co., Stamford, $149,926; Oscawana Building Co., New York, $151,427; Norcross Bros., Worcester, Mass., $155,550; S. W. Hubbell Building Co., $155,511; Willmarth-Mackillop Co., Pawtucket, R. I., $158,494.

✚Greenwich, Conn.—J. W. BISHOP & CO., 109 Foster St., Worcester, Mass., has been awarded the contract for excavating, footings and foundation work for the $250,000 hospital for the Greenwich Hospital Association. Noted Feb. 25.

✚New Haven, Conn.—The Board of Education has awarded the contract for the construction of the Abraham Lincoln School on Shelton Ave., to the J. N. LEONARD CO., at $50,950. Other bids were: James H. Hogan, $54,000; D. H. Clark Co., $53,941; Samuel C. Russell, $57,000; Charles W. Murdock, $51,961; Eastern Engineering & Construction Co., $62,594; Lewis A. Miller, Meriden, $53,219; H. Wales Lines Co., Meriden, $53,410; Dowling and Bottomley, Bridgeport, $52,636; Oscawan Bldg. Co., $53,970; Louckes & Clark, Wallingford, $59,809.

Waterbury, Conn.—The State Legislature has appropriated $60,000 for a site for a militia armory

Binghamton, N. Y.—The Scranton & Binghamton Traction Co., Scranton, Penn., plans to construct a terminal passenger and freight station at State and Washington St. Estimated cost, $50,000. Richard W. Day, Scranton, Penn., is Gen. Mgr.

✚Buffalo, N. Y.—The contract for the construction of a two-story, 61x146-ft. school on Tifft St. for the Holy Family Church has been awarded to MOSIER & SUMMERS, 1015 Delaware Ave., Buffalo. Max G. Beierl, German American Bank Bldg., is Arch.

Middletown, N. Y.—D. H. Canfield, Arch., Argus Blk., is preparing plans for the construction of a five-story building for the Merchants National Bank. The estimated cost is $75,000. Garrett T. Townsend is Pres.

New York, N. Y.—(Borough of Brooklyn)—Thomas W. Lamb, Arch., 644 Eighth Ave., New York, has prepared plans for the construction of a two-story theater at 44th St. and Fifth Ave. for B. S. Moss. The estimated cost is $150,000.

New York, N. Y.—(Borough of Brooklyn)—Plans have been prepared by Edward M. Adelsohn, Arch. and Engr., 1776 Pitkin Ave., for the construction of a five-story, 100x100-ft. fireproof building at Rockaway Parkway and Ave. A for the Brownsville and East New York Hospital. The estimated cost is $100,000.

New York, N. Y.—(Borough of Manhattan)—The Wells Bros. Co., 53 West Jackson Blvd., Chicago, Ill., plans to construct a 12-story apartment house at Fifth Ave. and 72d St. J. E. R. Carpenter, 68 East 66th St., New York, is Arch. The reported cost is $3,000,000.

New York, N. Y.—(Borough of Manhattan)—(Official)—Bids have been received for underpinning the foundations of the dormitory for females at the Metropolitan Hospital, Blackwells Island, as follows: Underpinning & Foundation Co., 290 Broadway, $20,850; Charles Meads & Co., 38 Park Row, $33,200; MacArthur Concrete Pile & Foundation Co., 11 Pine St., $45,930. Noted May 13.

New York, N. Y.—(Borough of Manhattan)—Plans have been prepared by Emery Roth, Arch., 405 Lexington Ave., for the construction of a 12-story apartment house at West End Ave. and 89th St. for the 601 West End Ave. Co., Inc. The estimated cost is $260,000. Noted Apr. 22.

Rochester, N. Y.—Bids will be received until June 10 by Gordon & Madden, Arch., Sibley Blk., for the construction of a school on Scio St. and University Ave. The estimated cost is $200,000. J. S. Mullan is Secy., Bd. of Education.

Rome, N. Y.—Plans are being prepared by Metzgar & Bullock, Arch., 18 East 41st St., New York, for the construction of a one-story building for the Rome Trust Co. Estimated cost, $50,000. Noted May 20.

Utica, N. Y.—Plans have been prepared by T. P. Barnett Co., Arch., Central National Bank Bldg., St. Louis, Mo., for the construction of a three- and four-story, 126x190-ft. building for the St. Elizabeth Hospital. Noted May 18.

✚Utica, N. Y.—GRIFFITHS & PIERCE, Utica, have been awarded the contract for the construction of a four-story, 127x192-ft. addition to the Martin Hotel. Estimated cost, $250,000. T. P. Barnett Co., 724 Central National Bank Bldg., St. Louis, Mo., is Arch. Noted Apr. 29.

Vineland, N. Y.—George S. Davis, Arch., Trenton, is preparing plans for the construction of a dormitory and dining-room at the State Hospital for Feeble Minded. The estimated cost is $90,000.

✚Watertown, N. Y.—The contract for the construction of additions and alterations to the three-story building for G. C. Sherman, Trust Co. Bldg., has been awarded to the CHARLEBOIS BROS. Estimated cost, $75,000.

Yorktown Heights, N. Y.—The Board of Managers of the State Charities Aid Association has passed a resolution petitioning the Governor to sign the Sage Bill. The bill provides for the appropriation of $300,000 to begin the construction of the Mohansic State Hospital for the Insane.

Collingswood, N. J.—Bids will be received until June 8, by the School Board, for the construction of a two-story addition to the high school. Clyde S. Adams is Arch. Estimated cost, $40,000. Noted Feb. 25 and Mar. 25.

Jersey City, N. J.—Bids will soon be received by the Board of Education for the construction of Public School No. 16 at Washington and Sussex St.

Jersey City, N. J.—Bids will soon be received by the Jersey City Lodge of Elks, for the construction of a building at 2853-57 Hudson Blvd. The estimated cost is $100,000. Patrick T. Powers is Pres. of Bldg. Com.

Jersey City, N. J.—Bids will be received until 2 p.m., June 10, by the Jersey City Commissioners, Assembly Chamber, for the construction of a laboratory on Summit Ave.

✚Jersey City, N. J.—The Board of Education has awarded the contract for the construction of Public School No. 5 to J. J. MARIONE CO., at $56,880. Noted Sept. 3.

Montclair, N. J.—The Board of Education plans to expend $40,000 in remodeling and fireproofing the high school at Montclair.

Newark, N. J.—Bids will be received until 3 p.m., June 8, by the Essex County Park Commission for the construction of an administration building at Branch Brook Park. Noted May 6.

†Trenton, N. J.—S. W. MATHER & SONS, Trenton, at $218,000, has been awarded the contract for the construction of the Junior High School. Noted May 20.

Connellsville, Penn.—The First Methodist Episcopal Church plans to construct a building at Connellsville. Estimated cost, $80,000.

Elizabethtown, Penn.—Guy King and E. A. Wightman, Archs., 1513 Walnut St., Philadelphia, have been retained by the Philadelphia Free Masons to prepare plans for the construction of five memorial hospital buildings at Elizabethtown.

Lancaster, Penn.—Plans are being prepared by C. E. Urban, Arch., Woolworth Bldg., Lancaster, for the construction of a two-story school. The estimated cost is $150,000.

Philadelphia, Penn.—Sauer & Hahn, Arch., 1112 Chestnut St., has prepared plans for the construction of a three-story theater and commercial building at 31st and Wilt St., for the Northwestern Realty Co. Estimated cost, $75,000.

†Philadelphia, Penn.—The contract for the construction of a three-story rectory on Price St. for the Mission of St. Vincent De Paul has been awarded to the JOSEPH BIRD CO., 213 North 11th St., Philadelphia. The estimated cost is $40,000.

†Tarentum, Penn.—(Official)—ROSE & FISCHER, Pennsylvania Ave., Pittsburgh, at $81,939, has been awarded the contract for the construction of a school in the First Ward. S. M. Kennedy is Secy. of School District. Noted Mar. 25.

CONCRETE RESERVOIR, SALEM, MASS.

Bids were received May 17 by the Board of Public Works, Salem, Mass., for the construction of a concrete covered reservoir from: (A) A. G. Tomasello; (B) Sessler-Weaver Co.; (C) Middlesex Contracting Co.; (D) David J. Sheehan Co.; (E) W. M. Bailey Co.; (F) Stuart & Sons Co.; (G) C. M. Leach; (H) Bruno & Petitti; (I) Fred T. Ley (informal); (J) W. T. Ryan Contracting Co.; (K) Davis & Brock. The item bids were as follows:

	A	B	C	D	E	F	G	H	I	J	K
1000 cu.yd. excavation	$1.00	$0.90	$0.95	$1.00	$1.00	$0.75	$1.33	$0.75	$1.00	$1.50	$0.80
25,000 cu.yd. earth fill	0.35	0.34	0.29	0.50	0.52	0.50	0.67	0.40	0.55	0.80	0.60
2200 cu.yd. concrete in piers and arches	8.45	6.72	8.70	11.00	10.20	11.75	10.67	12.00	15.00	11.00	14.00
1850 cu.yd. concrete in floor	7.00	13.05	8.40	8.00	8.55	7.25	8.23	10.00	7.50	9.00	11.00
3300 cu yd. all other concrete	6.30	5.54	8.40	8.50	8.90	8.50	7.63	9.00	9.25	8.00	8.00
53 tons reinforcing steel	75.00	80.00	80.00	80.00	51.30	75.00	69.00	80.00	60.00	80.00	90.00
Gate house, lump sum	1400.00	740.00	2500.00	1000.00	1174.00	1500.00	1673.00	1500.00	886.00	3600.00	2500.00
3 acres fertilizing and seeding	100.00	160.00	50.00	100.00	250.00	150.00	75.00	100.00	60.00	200.00	250.00
Appurtenances, lump sum	700.00	900.00	800.00	500.00	903.00	1900.00	3857.00	500.00	1200.00	1000.00	1500.00
Extended totals	$68,455	$72,968	$78,290	$86,590	$87,173	$88,387	$91,370	$91,890	$97,596	$98,190	$102,870

RAPID TRANSIT SYSTEM, NEW YORK, N. Y.

Route 49, Section 2

Bids were received May 18 by the Public Service Commission for the First District for the construction of Section 2, Route 49, a part of the Culver Rapid Transit Ry., Borough of Brooklyn, from: (A) Oscar Daniels & Co.; (B) Snare & Triest Co.; (C) A. L. Guidone & Son, Inc.; (D) Phoenix Bridge Co.; (E) McClintic-Marshall Co.; (F) Post & McCord; (G) Ft. Pitt Bridge Works; (H) Conners Bros. Co., Inc.; (I) T. A. Gillespie Co.; (J) Connex Engineering & Construction Co.; (K) Arthur McMullen; (L) E. E. Smith Contracting Co.; (M) Rodgers & Hagerty, Inc.; (N) Norton & Gorman Co.; (O) Max Raymond; (P) Jobson & Gifford Co.; (Q) H. B. Converse Co. The item bids were as follows:

	A	B	C	D	E	F	G	H	I
22,200 cu.yd. column excavation	$1.15	$1.50	$1.33	$1.70	$1.40	$1.35	$1.45	$2.50	$2.00
11,100 cu.yd. railroad duct excavation	1.15	1.50	1.40	1.30	1.25	1.30	1.35	1.50	2.00
8100 cu.yd. concrete masonry	4.00	5.90	7.80	6.05	5.90	6.10	6.00	6.90	6.85
10 cu.yd. brick masonry	15.00	22.00	15.00	20.00	15.00	15.00	15.00	20.00	16.00
14,900 lin.ft. timber piles	0.10	0.40	0.40	0.30	0.35	0.40	0.35	0.40	0.35
2 M. ft. b.m. timber foundation	40.00	70.00	54.00	60.00	75.00	60.00	60.00	60.00	45.00
290 lin.ft. vitrified drain pipe, 4-in.	0.50	0.70	0.20	0.25	0.25	0.25	0.35	0.30	0.45
313,500 duct ft. railroad ducts	0.16	0.13	0.15	0.105	0.12½	0.13	0.12	0.125	0.15
13,950 tons riveted steel	48.35	45.30	46.50	47.90	47.90	49.20	47.60	47.50	48.30
550 tons steel beams and shapes	48.35	45.30	46.50	47.90	43.90	49.20	46.35	48.00	48.30
5 tons steel roads and bars	50.00	60.00	60.00	55.00	60.00	60.00	70.00	55.00	35.00
240 tons miscellaneous iron castings	40.00	51.00	50.00	55.00	41.00	55.00	50.00	60.00	35.00
500 sq.yd. street surface restored	3.00	1.50	1.70	1.50	1.50	1.00	1.40	1.75	1.20
300 lin.ft. new bluestone curb, 5-in.	0.90	1.25	1.00	0.90	1.20	1.10	1.00	2.00	1.50
100 lin.ft. new bluestone curb, 4-in.	0.80	1.10	0.90	0.80	1.00	1.00	0.90	2.00	1.20
6000 lin.ft. for restoring old curb	0.15	0.35	0.35	0.30	0.20	0.20	0.40	0.25	0.25
22,800 lin.ft. electric (overhead trolley) railroad	1.00	2.00	0.97	1.05	1.70	0.90	2.20	1.00	1.00
100 lin.ft. depressing street surface railroad	7.15	3.00	4.50	2.50	1.70	0.50	0.60	4.00	5.00
100 lin.ft. lateral movement of surface tracks	4.15	4.00	4.50	4.00	1.70	0.50	2.00	2.00	5.00
100 lin.ft. 6-in. water pipe	0.80	1.00	0.22	1.00	1.00	1.00	1.00	0.70	1.00
100 lin.ft. 8-in. water pipe	1.00	1.00	0.23	1.25	1.25	1.10	1.25	1.00	1.00
300 lin.ft. 12-in. water pipe	1.50	1.50	0.32	1.50	2.50	1.20	1.50	1.75	1.25
100 lin.ft. 16-in. water pipe	2.00	1.50	0.41	1.75	3.00	1.50	2.00	2.50	2.25
100 lin.ft. 20-in. water pipe	3.00	2.00	0.45	2.50	4.25	2.50	2.50	3.50	2.75
100 lin.ft. 4-in. c.i. gas pipe	0.70	0.60	0.15	0.75	0.80	0.70	0.70	1.00	0.50
100 lin.ft. 6-in. c.i. gas pipe	0.85	1.00	0.22	1.00	1.05	1.00	1.00	1.50	0.50
100 lin.ft. 8-in. c.i. gas pipe	1.00	1.00	0.30	1.25	1.35	1.10	1.25	1.75	0.65
400 lin.ft. 20-in. c.i. gas pipe	2.00	2.00	0.50	2.00	4.50	2.20	2.50	4.00	3.00
10 lin.ft. new c.i. hob and spigot pipe	35.00	35.00	40.00	50.00	60.00	60.00	50.00	60.00	47.00
2 lin.ft. new c.i. hob and spigot pipe, special	70.00	60.00	50.00	80.00	60.00	80.00	70.00	80.00	47.00
2000 duct ft. electrical ducts and conduits in place	0.35	0.35	0.75	0.40	0.25	0.35	0.15	0.25	0.50
100 lin.ft. (a) 2½-in. w.i. pipe	0.40	0.67	0.75	0.65	0.50	0.40	0.40	0.80	0.50
100 lin.ft. fiber ducts	0.35	0.50	0.75	0.65	0.50	0.45	0.30	0.40	0.50
Extended totals	$863,775	$867,390	$877,097	$878,260	$885,676	$894,192	$898,184	$908,569	$914,204

	J	K	L	M	N	O	P	Q
22,200 cu.yd. column excavation	$1.80	$2.00	$1.25	$1.00	$1.80	$2.00	$1.75	$1.03
11,100 cu.yd. railroad duct excavation	1.00	2.00	1.50	1.00	1.55	2.00	1.45	1.15
8100 cu.yd. concrete masonry	7.10	7.00	6.25	7.00	6.80	7.00	6.85	6.14
10 cu.yd. brick masonry	10.00	15.00	12.50	15.00	21.00	20.00	15.00	23.00
14,900 lin.ft. timber piles	0.45	0.40	0.40	0.35	0.42	0.30	0.40	0.38
2 M. ft. b.m. timber foundation	70.00	45.00	40.00	50.00	50.00	100.00	60.00	60.00
290 lin.ft. vitrified drain pipe, 4-in.	0.40	0.30	0.30	0.40	0.50	1.00	0.35	0.42
313,500 duct ft. railroad ducts	0.13	0.15	0.125	0.15	0.135	0.13	0.15	0.13
13,950 tons riveted steel	50.00	49.50	50.50	50.00	49.80	48.25	49.70	59.74
550 tons steel beams and shapes	50.00	49.50	50.50	50.00	49.80	48.75	49.70	53.74
5 tons steel roads and bars	60.00	50.00	40.00	55.00	65.00	70.00	55.00	80.00
240 tons miscellaneous iron castings	75.00	40.00	50.00	55.00	54.00	50.00	60.00	58.85
500 sq.yd. street surface restored	2.00	1.50	1.00	2.50	0.80	2.00	1.80	2.25
300 lin.ft. new bluestone curb, 5-in.	1.00	1.00	1.25	1.00	1.10	1.50	1.35	1.00
100 lin.ft. new bluestone curb, 4-in.	1.00	0.90	1.00	1.00	0.90	1.40	1.25	1.00
6000 lin.ft. for restoring old curb	0.25	0.30	0.45	0.25	0.20	0.50	0.35	0.25
22,800 lin.ft. electric (overhead trolley) railroad	0.60	0.50	1.65	2.00	1.45	2.00	3.25	1.49
100 lin.ft. depressing street surface railroad	0.50	5.00	5.00	2.00	2.50	5.00	1.50	2.35
100 lin.ft. lateral movement of surface tracks	1.50	5.00	5.00	2.00	1.75	5.00	2.70	3.53
100 lin.ft. 6-in. water pipe	0.10	0.50	0.50	0.50	0.90	1.00	1.90	0.47
100 lin.ft. 8-in. water pipe	0.10	0.50	0.75	0.75	1.20	1.25	2.37	0.60
300 lin.ft. 12-in. water pipe	0.10	1.00	1.00	1.00	1.60	1.50	3.15	1.06
100 lin.ft. 16-in. water pipe	0.10	1.25	1.50	1.50	2.25	2.00	4.90	1.48
100 lin.ft. 20-in. water pipe	0.10	1.50	2.00	2.00	2.70	2.50	7.05	2.45
100 lin.ft. 4-in. c.i. gas pipe	0.10	0.40	0.50	0.50	0.75	0.75	1.45	0.43
100 lin.ft. 6-in. c.i. gas pipe	0.10	0.50	0.75	0.75	1.10	1.00	1.77	0.60
100 lin.ft. 8-in. c.i. gas pipe	0.10	0.50	1.00	1.00	1.50	1.25	2.17	0.77
100 lin.ft. 20-in. c.i. gas pipe	0.10	1.50	2.00	2.50	3.00	2.50	3.00	2.35
40 lin.ft. new c.i. hob and spigot pipe	100.00	45.00	30.00	30.00	55.00	70.00	40.00	47.00
2 lin.ft. new c.i. hob and spigot pipe, special	150.00	60.00	75.00	65.00	80.00	100.00	75.00	70.00
2000 duct ft. electrical ducts and conduits in place	0.10	0.50	0.10	0.50	0.55	0.60	0.25	0.53
100 lin.ft. (a) 2½-in. w.i. pipe	0.10	0.50	0.50	1.00	0.60	0.80	0.35	0.53
100 lin.ft. fiber ducts	0.10	0.50	0.50	1.00	0.40	0.60	0.35	0.53
Extended totals	$918,126	$922,637	$929,759	$933,861	$936,800	$937,045	$982,587	$1,051,006

✚Huntington, W. Va.—The contract for the construction of the six-story Enslow Bldg. at Third Ave. and 11th St. has been awarded to E. N. ALGER, Huntington. Noted May 20.

Clarksdale, Miss.—The City Commissioners are considering the proposition to expend $150,000 for the construction of a school and city hall.

Bastrop, La.—The citizens of the Second School District voted in favor of the question of issuing $55,000 in bonds. The proceeds will be used for the construction of a school. Noted Apr. 22.

Lexington, Ky.—Plans are being prepared by Tietig & Lee, Arch., Lyric Bldg., Cincinnati, Ohio, for the construction of a general tuberculosis hospital. Mrs. Desha Breckinridge is interested.

Cincinnati, Ohio—The Building Committee of the Board of Education has approved the plans prepared by Garber & Woodward, Arch., Union Central Bldg., for the construction of the Walnut Hills High School on Madison Rd., Hyde Park. Estimated cost, $100,000. Noted Feb. 25.

Cleveland, Ohio—Bids will be received about June 15 for the construction of a four-story addition to the St. Alexis Hospital, Broadway and McBride Ave. The estimated cost is $100,000. W. C. Jansen, 403 O'Brien Bldg., is Arch.

Cleveland, Ohio—The Bohemian Catholic National Home Association plans to construct a three-story clubhouse at Broadway, Mumford and Barkwill Ave. The estimated cost is $100,000. Edward Kriz is Secy.

Cleveland, Ohio—Plans are being prepared for the construction of a five-story commercial and apartment building at East 105th St. and Euclid Ave. for the Doan Realty Co. Estimated cost, $200,000. Sydney S. Harvey, The Arcade, is interested.

Cleveland, Ohio—E. J. Schneider, Arch., 606 Cuyahoga Bldg., is preparing plans for the construction of an auditorium and gymnasium at 1939 West 54th St. for the St. Stephens Parish.

Columbus, Ohio—Revised plans are being prepared by Frank L. Packard, Arch., New Hayden Bldg., for the construction of a union terminal station. The estimated cost is $1,000,000. Noted Sept. 24 and Mar. 11.

Newburg, Ohio—(Cleveland post office)—Plans have been prepared by William J. Carter, Arch., 1423 Illuminating Bldg., Cleveland, for the construction of a temple at Miles Park Ave. for the Newburg Masonic Temple Co. Estimated cost, $50,000. Noted Apr. 15; under Cleveland, Ohio, Feb. 18 and May 6.

✚Urbana, Ohio—A. M. FRY, Piqua, at $44,000, has been awarded the contract for the construction of a two-story Masonic Temple at Urbana. Noted May 20.

✚Elkhart, Ind.—GRANT B. BUSHNELL, Elkhart, at $72,514, has been awarded the contract for the construction of a city hall.

Indianapolis, Ind.—The Scottish Rite Masons of Indiana plan to construct a temple to cost about $500,000. Calvin W. Busch, is Grand Master of the Adoniram Grand Lodge of Perfection.

✚Richmond, Ind.—The contract for the construction of a bank building at Eighth and Main St. for the Dickinson Trust Co. has been awarded to MEILING & CO., Chicago, Ill. Estimated cost, $60,000.

✚Grand Rapids, Mich.—The contract for the construction of a six-story addition to the Crathmore Hotel has been awarded to GENTZ BROS. Estimated cost, $80,000.

Chicago, Ill.—S. Scott Jay, Arch., is preparing plans for the construction of a building for the Union Bag & Paper Co. The estimated cost is $250,000.

Chicago, Ill.—Plans are being prepared by Marshall & Fox, Arch., 38 South Dearborn St., for the construction of a 10-story hotel at Baltimore Ave. The estimated cost of the entire project is $1,000,000. Corbett & Connery are interested.

Chicago, Ill.—Louis C. Wagner, 4330 Park Ave., plans to construct an apartment house on Jefferson Ave. near 53d St. The estimated cost is $100,000.

Oak Park, Ill.—Rufus A. Harlan plans to construct a building containing 30 apartments, at Washington Blvd. and Ridgeland Ave. The estimated cost is $100,000.

Milwaukee, Wis.—(Official)—Bids will be received about June 25 by Charles Ellis Malig, City Arch., for the construction of a two-story natatorium in the 14th Ward. The estimated cost is $60,000. Noted May 20.

✚Superior, Wis.—The contract for the construction of an exchange building on John Ave. between 14th and Belknap St. for the Wisconsin Telephone Co. has been awarded to EMIL SEDLACHEK, Superior. Estimated cost, $45,000. Noted Jan. 14 and 21.

✚Boone, Iowa—The contract for the construction of an eight-story building for the First National Bank has been awarded to the EVANS CONSTRUCTION CO., Mexico, Mo., at about $100,000. Noted Mar. 4.

Davenport, Iowa—At an election held recently the citizens voted in favor of issuing $55,000 in bonds, the proceeds of which will be used for the construction of a manual training building.

Malvern, Iowa—The Carnegie Corporation of New York, 576 Fifth Ave., New York, N. Y., plans to construct a library at Malvern. Estimated cost, $75,000.

Roland, Iowa—W. F. Gernandt, Arch., State Bank Bldg., Omaha, Neb., is preparing plans for the construction of a school. The estimated cost is $50,000. Noted May 6.

Sioux City, Iowa.—The Trinity Lutheran Church plans to construct an $80,000 church and parsonage at 12th and Jackson St. David R. Huber is Pastor.

Ironton, Minn.—Edward F. Broomhall, Arch., 710 Alworth Bldg., Duluth, is preparing plans for the construction of a high school. The estimated cost is $100,000.

Minneapolis, Minn.—The Local Order of the Brotherhood of American Yeoman contemplates the construction of a clubhouse. Estimated cost, $50,000.

Ellendale, N. D.—(Official)—Bids will be received until 2 p.m., June 4, by B. R. Crabtree, Clk., Bd. of Education, for the construction of the Ellendale School. The estimated cost is $45,000. Gilbert R. Horton, Jamestown, is Arch. Noted May 13.

Miles City, Mont.—Plans are being prepared by B. Riveness, Arch., for the construction of a three-story, 64x124-ft. addition to the high school. Estimated cost, $60,000.

St. Louis, Mo.—Oscar A. Elmo, 5656 Waterman Ave., plans to construct three three-story apartment houses on Waterman Ave. near Belt Ave. The estimated cost is $90,000.

St. Louis, Mo.—Paul Brown plans to construct a hotel at 18th St. and Washington Ave. The estimated cost is between $500,000 and $750,000.

Marlin, Tex.—(Official)—An election will be held June 15 to vote on the question of issuing $60,000 in bonds. The proceeds will be used for the construction of a school. I. H. Ponell is City Secy.

Tulsa, Okla.—S. Gallais plans to construct an eight-story bank and office at Fourth St. and Boston Ave. The estimated cost is $150,000.

Denver, Colo.—At an election held May 18 the citizens voted against the question of issuing bonds for the construction of the following buildings: Criminal Court Building, $125,000; city market, $150,000; hospital addition, $500,000; Women's Industrial Home, $50,000. Noted Apr. 8 and 29.

Loveland, Colo.—(Official)—At a recent election the citizens voted against the question of issuing $100,000 in bonds. The proceeds was to have been used for the construction of a high school. Mary N. Kieler is Secy., Bd. of Education. Noted Mar. 11.

ROAD DISTRICT NO. 1, HARRISON COUNTY, TEXAS

✚Bids were received Apr. 6 by the Commissioners Court of Harrison County, Marshall, Tex., for the improvement of Road District No. 1, from: (A) W. T. Montgomery, San Antonio; (B) J. H. Howard & Son, Cameron; (C) Roach, Manigan Paving Co., Ft. Worth; (D) SMITH BROS., Crockett (awarded contract); (E) E. Key, Jr., Marshall; (F) Wetzell & Co., Danville, Ill.; (G) J. N. George & Sons; (H) S. A. Gano, Jackson, Miss.; (I) O. C. McElrath, Tyler; (J) Owens Construction Co., Vicksburg, Miss. The item bids were as follows:

	A	B	C	D	E	F	G	H	I	J
72,300 cu.yd. earth excavation	$0.22	$0.21½	$0.20	$0.15½	$0.20	$0.30	$0.25	$0.21	$0.21	$0.19½
Cu.yd. loose rock excavation	0.30	0.50	0.40	0.35	0.50	0.60	0.40	0.50	0.40	0.40
Cu.yd. solid rock excavation	0.50	1.60	1.00	0.80	1.10	1.00	0.75	0.70	0.80	0.90
11,500 cu.yd. material hauled 100 to 500 ft.	0.02	0.04	0.02	0.02	0.02	0.03	0.03	0.01½	0.20	0.01½
2.5 acres clearing	20.00	20.00	60.00	15.00	40.00	50.00	50.00	25.00	20.00	0.30
1.75 acres grubbing	30.00	50.00	90.00	50.00	75.00	75.00	100.00	40.00	50.00	30.00
51 station fencing to be moved or built	1.00	1.00	2.25	1.00	3.00	1.20	1.26	1.80	1.00	3.00
556 cu.yd. concrete plain	14.00	10.00	10.00	8.00	10.00	16.50	10.85	11.50	9.00	8.00
198 cu.yd. concrete reinforced	19.00	13.00	14.00	11.00	15.00	17.50	12.85	12.50	12.00	10.00
133 ft. hauling and laying 15-in. corrugated metal pipe	0.25	0.15	0.25	0.15	0.30	0.30	0.25	0.25	0.15	0.25
194 ft. hauling and laying 18-in. corrugated metal pipe	0.25	0.20	0.25	0.18	0.30	0.32	0.25	0.25	0.15	0.25
308 ft. hauling and laying 24-in. corrugated metal pipe	0.30	0.20	0.25	0.24	0.35	0.50	0.30	0.25	0.20	0.30
50 ft. hauling and laying 30-in. corrugated metal pipe	0.35	0.25	0.25	0.30	0.50	0.60	0.30	0.25	0.25	0.35
84 ft. hauling and laying 36-in. corrugated metal pipe	0.35	0.30	0.25	0.36	0.75	0.65	0.35	0.35	0.30	0.40
Hauling and laying 42-in. corrugated metal pipe, per ft.	0.40	0.50	0.30	0.42	1.00	0.75	0.40	0.50	0.40	0.45
Hauling and laying 48-in. corrugated metal pipe, per ft.	0.40	0.70	0.35	0.48	1.25	1.00	0.50	0.50	0.45	0.50
Timber in culverts and bridges		35.00	32.00	37.50	60.00	45.00	40.00	32.00	40.00	45.00
Ft. piling in bridges			0.50	0.60	0.50	0.80	0.85	0.50	0.40	0.60
5.55 mile grassing shoulders and slopes	25.00	100.00	75.00	30.00	70.00	40.00	115.00	30.00	40.00	100.00
7966 cu.yd. crushing, hauling, spreading local stone	1.00	0.90	1.00	0.55	0.90	1.15	1.10	0.90	0.75	1.30
21,703 cu.yd. unloading, hauling, spreading, shaping and maintaining gravel 1 mile free haul	0.60	0.50	0.55	0.48	0.80	0.65	0.70	0.65	0.50	0.55
47,881 cu.yd. gravel to be hauled ½ mile beyond free haul	0.10	0.10	0.08	0.09	0.10	0.10	0.08	0.08	0.10	0.08
7.5 mile, 14 in. wide, 13.8 mile, 9 in. wide mile preparing and rolling subgrade, rolling, sprinkling and finishing gravel as per specifications	200.00	300.00	200.00	142.50	250.00	250.00	175.00	160.00	600.00	200.00
31,000 lb. hauling and placing steel I-beams and hand rails, including the hauling and placing of floor system	0.02	0.01	0.02	0.02	0.01	0.02½	0.03	0.01	0.01	0.02
Cu.yd. sand or clay in place measured loose, where roadway is sand	0.30	0.65	0.30	0.38	0.55	0.90	0.60	0.34	0.40	0.40
Cu.yd. sand or clay in place measured loose, where roadway is clay	0.30	0.60	0.30	0.38	0.45	0.90	0.60	0.34	0.40	0.35
Sand clay or sand or clay hauled 100 ft. overhaul			0.02	0.02	0.03	0.05	0.05	0.01½	0.02	0.02
Mixing, rolling, dragging and maintaining sand clay	150.00	200.00	200.00	150.00	300.00	300.00	100.00	60.00	164.30	180.00
Extended totals	$59,400	$55,633	$53,137	$41,894	$59,774	$70,543	$61,546	$54,048	$60,447	$54,819

Douglas, Ariz.—Lescher & Kibbey, Arch., Bank of Commerce Bldg., Phoenix, has been commissioned by the Board of Education to prepare plans for the construction of a high school. The estimated cost is $70,000.

Florence, Ariz.—Plans are being prepared by Lescher & Kibbey, Arch., Bank of Commerce Bldg., Phoenix, for the construction of a two-story, 75x140-ft. high school for the Union High School District The estimated cost is $55,000.

Spokane, Wash.—The Powell-Sanders Co. plans to rebuild its wholesale building, recently destroyed by fire with a loss of $150,000.

Tacoma, Wash.—Plans are being prepared for the construction of a six-story brick business block for the Tacoma Furniture & Outfitting Co. The estimated cost is $100,000.

Walla Walla, Wash.—Robert F. Tegen, Arch., Morgan Bldg., Portland, Ore., has been retained to prepare plans for the construction of a building for St. Mary's Hospital. The estimated cost is $150,000. Noted May 6

+Pendleton, Ore.—(Official)—The contract for the construction of a three-story wing at the State Hospital for the Insane has been awarded to OLSON & JOHNSON CO., Missoula, Mont., at $83,125. W. C. Knighton is Arch. Noted Feb. 18 and May 6

Fresno, Calif.—Bids will be received until 2 p.m., June 8, by D. M. Barnwell, Clk., Bd. of Supervisors, for the construction of a brick exhibit building for the County of Fresno. Scott McKay is County Surveyor.

Hydepark, Calif.—The Winget Construction Co., Grant Bldg., Los Angeles, at $42,600, submitted the lowest bid for the construction of a grammar school. G. A. Howard, Arch., Grant Bldg., Los Angeles, prepared the plans.

Los Angeles, Calif.—The Board of Education has approved the plans prepared by Withey & Davis, Arch., Story Bldg., for the construction of a two-story school on Rowan Ave. Estimated cost, $45,000.

+Los Angeles, Calif.—The Board of Education has awarded the contract to M. S. YESBERG, 1650 Morton Ave., Los Angeles, at $41,860, for the construction of a school at 1327 East 20th St. Eisen & Son, Wilcox Bldg., is Arch. Noted Mar. 18.

Los Angeles, Calif.—Plans have been prepared by Walker & Vawter, Arch., Hibernian Bldg., for the construction of a two-story school on South Park and Manchester Ave. Estimated cost $45,000.

+Los Angeles, Calif.—A. S. & C. O'NEIL, Lankershim Bldg., Los Angeles, at $42,000, has been awarded the contract for the construction of a three-story apartment house at Toberman and 21st St. for Mrs. L. J. Hamer.

Los Angeles, Calif.—J. C. Austin, Arch., 1125 Baker-Detwiler Bldg., is preparing plans for the construction of a high school in the shape of the letter "H," on the Country Club Drive between Wilshire Blvd. and Pico St. The main section of the structure will be four stories, 60x342 ft., with four wings, two with three stories, 65x80-ft. and two with two stories, 60x65-ft. The estimated cost is $380,000.

Los Angeles, Calif.—(Official)—Bids will be received until June 10 by the Secretary of the Board of Education for the construction of a school on First and Vermont St. The estimated cost is $50,000. Hunt & Burns, 701 Laughlin Bldg., is Arch. Noted May 20.

+Pomona, Calif.—The contract for the construction of a five-story hotel on Third St. and Carey Ave. for W. M. Avis has been awarded to the MILWAUKEE BUILDING CO., Wright and Callender Bldg., Los Angeles. Estimated cost, $65,000.

+Redondo Beach, Calif.—The contract for the construction of a high school for the Redondo Union High School District has been awarded to the LOS ANGELES PLANING MILL CO., 1812 Industrial St., Los Angeles, at $102,760. Allison & Allison, Hibernian Bldg., Los Angeles, is Arch. Noted Feb. 18 and Mar. 4.

San Bernardino, Calif.—Plans are being prepared by Jeffrey & Schafer, Arch., Wesley Roberts Bldg., Los Angeles, for the construction of a building for the First Congregational Church. The estimated cost is $50,000. Noted May 6.

+San Diego, Calif.—The contract for the construction of a seven-story reinforced-concrete hotel on First St. for the Oregon Investment Co. of San Francisco, has been awarded to J. B. WARNER, Monadnock Bldg., San Francisco, at $326,045. Noted Feb. 25.

Santa Ana, Calif.—A. J. Cruickshank, S. J. Jackman, J. C Metzgar and D. G. Cole are interested in a project to construct a hotel. The estimated cost is $109,000.

Stockton, Calif.—An armory will be constructed at the north end of the State Hospital property near California St The estimated cost is $50,000. Lawrence Edwards is interested

Taft, Calif.—An election will be held June 10 to vote on the question of issuing $60,000 in bonds. The proceeds will be used for the construction of a high school.

Toronto, Ont.—The Princess Theater, recently destroyed by fire with a loss of $100,000. will be rebuilt.

Winnipeg, Man.—The Winnipeg School Board plans an expenditure of $150,000 for the construction of additional schools at Winnipeg. The Commissioner of Buildings is preparing the plans.

BUYING OF MUNITIONS OF WAR

Orders placed with American factories for munitions of war in the last two months have exceeded the amount that even those familiar with the expenditures had set as an outside figure. The buying has been so enormous that all the machine shops making lathes have been cleaned out of machines and are unable to supply any for months to come. Shops which are only indifferently equipped for the manufacture of such material, are turning out shrapnel, and it is probable that plants in the United States are making at least 50,000 pieces of shrapnel a day. Canadian plants are making from a quarter to half as much more, and it is considered probable that within three months the capacity of the plants in the United States and Canada will be doubled. Three-inch 15-lb. shells made here, cost $18 each, ready to fire. On a large order placed by the Russian Government, the price was $15 to $16. In the army operations in northern France, 200,000 to 300,000 pieces of shrapnel are used daily, an expenditure of $25,000,000 to $40,000,000 a week for this item alone. For rifles, the capacity of the plants in the United States is being taxed to the utmost. Prior to the war, many of the army rifles used by European nations could be made and sold at a profit for $15. Now the price is $27.50 for the same rifle. Cartridges are the one thing which have not advanced in proportion, as their use is comparatively small. Cartridges now cost from $35 to $40 a thousand, compared with $25 a year ago. Some of the chemicals used for the manufacture of explosives have advanced exceedingly rapidly. Sodium chlorate is now 17c. per lb., compared with 8c. before the war began. Carbolic acid is now $1.35 compared with 7c. Benzol is $1.25 per gal. compared with 25c. Quicksilver, per flask, is $75, compared with $35 before the war, and chlorate of potash is 35c. per lb. compared with 8c. The effect of the heavy buying on the market has only just been felt; while most of the ammunition makers have covered their supplies for a year or two, the activities of the factories have just begun. Even should the war end suddenly, as many now believe, it is unlikely that there will be any large cancellations, as the European governments will want to replenish their arsenal stocks, which by this time must be sadly depleted.

The Cement Products Exhibition Co., Chicago, Ill., which is in charge of the ninth annual Cement Show, to be held Feb. 12 to 19, 1916, has elected officers as follows: Pres., B. F. Affleck; Vice-Pres., A. Y. Gowen; Treas., J. U. C. McDaniel; Sec., Robert F. Hall, 208 South La Salle St., Chicago.

The American Cement Tile Mfg. Co. has moved its New York office to 50 Church St.

T. A. McCarthy & Son, Lufkin, Tex., Consult., Designing and Superv. Engr., announces the installation of a testing laboratory. The firm is prepared to make both chemical and physical tests of clays, lime, cement, sand, gravel, and other materials, chemical tests and analyses of fluids, clays, oil, fertilizers, and animal and vegetable matter generally.

The Wright Machine Co. has recently been incorporated, and commenced business at Owensboro, Ky., May 1. This company succeeds the Gunther-Wright Machine Co., and will manufacture gas engines, excavating machines, and wet dredge machines, equipped with both steam and oil engines.

The Steel Plant of the International High Speed Steel Co., Rockaway, N. J., is now nearing completion, and it is expected that it will be in full operation by the latter part of June. The product will be confined to the highest qualities of tool steels, alloy steels, high-speed steels of all shapes and sizes. The company markets the "Bulldog" brand.

CALIFORNIA STATE HIGHWAY, SONOMA COUNTY
Division IV, Route 1, Section C

Bids were received Apr. 26 by the state Highway Commission, Forum Bldg., Sacramento, for the construction of a portion of the State Highway in Sonoma County, Division IV, Route 1, Section C, from: (A) L. F. Gerdetz, San Francisco; (B) W. B. Hunt & Son, Alameda; (C) Bates, Borland & Ayer, Oakland; (D) James Fitzpatrick, Sacramento; (E) Marin Rock Co., San Anselmo; (F) Hoffman & McLaren, Oakland; (G) Fairbanks & Baechtel, Willits; (H) Peterson & Grier, San Francisco; (I) Twohy Bros. Co., San Francisco; (J) Blanchard-Brown Co., San Francisco; (K) Engineer's Estimate. The state will furnish pipe railing for culverts, reinforcing-steel, corrugated iron pipe, portland cement, and sand and coarse aggregate for concrete, at an approximate cost of $31,568. The item bids were as follows:

	A	B	C	D	E	F	G	H	I	J	K
31,000 cu.yd. excavation, unclassified	$0.55	$0.48	$0.68	$0.70	$0.49	$0.60	$0.75	$0.70	$0.48	$0.62	$0.50
260 lin.ft. 12-in. corrugated iron pipe	0.50	0.50	0.50	0.50	0.40	0.40	0.60	0.50	0.30	0.55	0.50
200 lin.ft. 15-in. corrugated iron pipe	0.60	0.50	0.60	0.60	0.55	0.50	0.70	0.60	0.35	0.65	0.60
400 lin.ft. 18-in. corrugated iron pipe	0.70	0.50	0.70	0.75	0.65	0.60	0.90	0.75	0.50	0.76	0.70
140 lin.ft. 24-in. corrugated iron pipe	0.80	0.50	0.70	1.00	0.75	0.75	1.35	1.00	0.60	1.00	0.80
110 lin.ft. 30-in. corrugated iron pipe	1.00	0.50	0.80	1.25	0.90	1.00	1.85	1.20	0.70	1.25	1.10
310 cu.yd. concrete, Class B (culverts and monuments)	10.00	10.00	12.50	12.00	8.05	9.00	12.50	11.00	9.00	10.00	8.50
7100 cu.yd. concrete pavement, Class B	3.10	3.35	2.90	4.00	2.73	3.10	3.50	3.70	2.64	3.80	3.25
7000 lin.ft. guard rail	0.40	0.50	0.35	0.40	0.30	0.25	0.40	0.30	0.38	0.30	0.30
146 monuments, hauling and setting	1.00	0.50	1.00	1.00	1.60	1.00	1.00	1.50	1.00	2.50	0.50
Extended totals	$45,858	$45,893	$48,857	$57,593	$40.080	$45,955	$55,969	$54,521	$39,729	$51,619	$54,333

DORCHESTER BROOK SEWER, BOSTON, MASS.

✚Bids were received by the Sewer and Water Division of the Public Works Department, Boston, for the construction of the Dorchester Brook Sewer in private land and Judson St. between Brook Ave. Pl. and Brookford St., Dorchester, from: (A) WEST ROXBURY TRAP ROCK CO., Roxbury (awarded contract); (B) Anthony Baruffaldi; (C) M. Russo & Sons; (D) Henry Sprague Contracting Co.; (E) William J. Barry; (F) James J. Conway; (G) Peter Bompiani; (H) A. G. Tomasello; (I) Antony Cefalo; (J) McCarthy & Walsh; (K) George M. Bryne; (L) Coleman Bros.; (M) William Barrett Co.; (N) Peter W. Hill; (O) John Landis; (P) Charles Satorel; (Q) John Guarino; (R) Robert L. Barrett; (S) Hugh Nawn Contracting Co.; (T) Engineer's Estimate. The item bids were as follows:

	A	B	C	D	E	F	G	H	I	J
812 lin.ft. 15-in. pipe sewer	$0.50	$5.00	$0.50	$4.00	$0.00	$2.00	$1.54	$0.60	$0.50	$0.50
793 lin.ft. 12-in. pipe sewer	0.50	1.00	0.50	4.00	0.00	2.00	1.25	0.60	0.50	0.35
40 lin.ft. 12-in. pipe sewer under concrete and brick surface drain	0.50	1.00	0.50	2.00	0.00	4.00	1.79	0.60	1.00	2.40
12 lin.ft. 10-in. pipe sewer	2.00	1.00	0.50	2.00	2.00	2.00	1.79	2.00	1.00	2.00
6 lin.ft. 18-in. pipe sewer	1.00	1.00	0.50	2.50	2.00	2.00	2.00	0.50	1.00	1.00
780 lin.ft. 7 ft. 3½ in. x 6 ft. 8 in. concrete and brick sewer pipe	8.35	30.00	8.00	8.00	20.00	5.70	10.00	7.00	14.25	13.00
647 lin.ft. 5 ft. 9 in. x 5 ft. 3 in. concrete and brick sewer drain	6.35	10.40	6.75	6.00	17.00	5.70	8.00	5.00	10.75	11.50
137 lin.ft. 6 ft. 9 in. x 6 ft. 2 in. concrete and brick sever drain	8.60	17.00	8.00	9.00	20.00	5.70	7.50	7.70	14.25	16.25
16 lin.ft. 4 ft. 6 in. x 4 ft. 0 in. concrete and brick sewer	3.00	25.00	4.85	5.00	20.00	5.70	3.30	4.00	7.00	8.65
Earth excavation below grade per cu. yd	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50
Earth excavation above grade per cu. yd	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
1500 cu.yd. rock excavation	5.00	0.01	4.00	0.00	0.00	0.00	2.75	6.00	5.00	5.00
Gravel refill	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40
135 M ft. b.m. spruce lumber	1.00	0.01	10.00	0.00	0.00	30.00	37.00	20.00	0.00	0.00
10 M ft. b.m. spruce lumber 2 in. planed and matched	0.01	0.01	5.00	45.00	0.00	50.00	43.00	30.00	63.00	0.00
15 M ft. b.m. spruce lumber 3 in. to 6 in. planed and grooved	0.01	0.01	5.00	50.00	0.00	60.00	80.00	40.00	0.00	0.00
5 M ft. b.m. pile caps platform	0.01	0.01	5.00	40.00	0.00	50.00	39.00	30.00	0.00	0.00
1600 lin.ft. pipe underdrain	0.01	0.01	0.15	0.20	0.00	0.00	0.45	0.10	0.00	0.00
2400 cu.yd. Class A concrete	7.00	0.01	7.50	7.50	5.00	8.00	5.75	8.00	7.50	7.00
40 cu.yd. Class A general concrete	7.00	0.01	7.50	7.50	0.00	7.00	6.00	8.00	10.00	0.00
Class A concrete mixed with hydrated lime	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
300 cu.yd. Class B concrete	5.00	0.01	6.75	7.00	5.00	6.50	5.50	6.00	0.00	6.50
275 cu.yd. Class C concrete	5.00	0.01	6.00	7.00	0.00	6.00	5.20	5.00	0.00	0.00
100 lin.ft. 10-in. pipe catch basin drain	1.00	0.75	0.50	0.50	0.50	1.00	1.00	1.00	1.00	1.00
100 lin.ft. pipe for chimneys	2.00	1.00	0.15	0.50	0.50	0.25	0.10	0.10	0.10	0.10
575 lin.ft. P.H. drain under concrete and brick sewer pipe	0.50	0.25	0.50	0.50	0.50	0.25	0.45	0.50	0.50	0.25
40 lin.ft. relaying existing house drain	2.00	1.00	0.50	0.50	0.00	1.00	5.75	0.50	2.00	1.00
25 lin.ft. relaying other existing drain, house or catch basin drain	2.00	0.01	0.50	0.50	0.00	1.00	6.00	0.50	2.00	0.00
Y's placed	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Slants or connections placed	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
135 slants or connections placed, new work	0.01	0.10	0.50	0.25	0.10	0.25	2.50	0.25	0.25	0.10
40 lin.ft. laying and connecting 3 in. to 8 in. metal pipe	1.00	0.01	0.50	0.50	0.00	1.00	0.60	0.50	1.00	0.00
Steel rods or bars	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00
8 man holes on sewer	40.00	75.00	75.00	70.00	50.00	50.00	49.00	80.00	80.00	100.00
5 man holes on surface drain	40.00	50.00	40.00	65.00	50.00	40.00	49.00	60.00	50.00	40.00
3 special inlet man holes	50.00	75.00	85.00	85.00	50.00	70.00	150.00	100.00	100.00	100.00
1 specially combined sewer and gate house	75.00	75.00	125.00	100.00	75.00	100.00	150.00	150.00	100.00	175.00
1 manhole built over old sewer	50.00	60.00	65.00	60.00	50.00	50.00	100.00	80.00	100.00	75.00
4 catch basins built	60.00	60.00	60.00	50.00	50.00	50.00	37.00	60.00	60.00	55.00
Existing manhole inverts and retaining wall	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
120 cu.yd. brick masonry	10.00	15.00	14.75	15.00	15.00	15.00	14.25	22.00	15.00	17.00
Catch basin traps, taken out, reset	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
Guttermouths	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
3 connections between new and existing conduits	5.00	20.00	5.00	10.00	5.00	10.00	100.00	10.00	25.00	10.00
Single strength sewer pipe	80%	75%	70%	68%	70%	70%	70%	66%	70%	70%
Double strength sewer pipe	80%	50%	70%	50%	50%	60%	70%	66%	30%	65%
Protecting of buildings	200.00	200.00	5.00	300.00	0.00	2500.00	400.00	100.00	0.00	1000.00
420 lin.ft. removing old sewer or drains	0.50	0.01	0.15	1.00	0.50	5.00	0.59	0.10	0.00	0.00
Extended totals	$44,470	$46,538	$47,255	$47,739	$47,868	$50,309	$51,222	$52,705	$52,759	$53,242

	K	L	M	N	O	P	Q	R	S	T
812 lin.ft. 15 in. pipe sewer	$0.90	$0.50	$0.75	$0.20	$4.53	$2.00	$0.75	$2.25	$0.75	$1.00
793 lin.ft. 12 in. pipe sewer	0.70	0.45	0.75	0.20	4.50	2.00	0.65	2.25	0.60	0.75
40 lin.ft. 12 in. pipe sewer under concrete and brick surface drain	1.00	2.25	2.00	1.00	4.61	2.00	0.50	2.25	4.65	0.75
12 lin.ft. 10 in. pipe sewer	1.00	2.00	2.00	1.00	3.23	2.00	0.50	2.25	4.35	1.00
6 lin.ft. 18 in. pipe sewer	1.00	2.00	2.00	2.00	5.00	2.00	1.00	2.50	5.00	0.25
780 lin.ft. 7 ft. 3½ in. x 6 ft. 8 in. concrete and brick sewer pipe	12.60	11.00	12.00	15.00	10.20	8.00	13.00	11.00	11.75	11.00
647 lin.ft. 5 ft. 9 in. x 5 ft. 3 in. concrete and brick sewer drain	9.65	8.50	9.00	13.00	8.10	9.00	13.00	9.50	9.00	9.00
137 lin.ft. 6 ft. 9 in. x 6 ft. 2 in. concrete and brick sewer drain	14.30	13.00	14.00	15.00	11.74	10.00	13.00	10.50	12.00	11.50
16 lin.ft. 4 ft. 6 in. x 4 ft. 0 in. concrete and brick sewer	7.80	6.00	5.00	8.00	8.66	5.00	4.00	7.00	6.90	1.00
Earth excavation below grade per cu.yd	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	.....
Earth excavation above grade per cu.yd	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	.....
1500 cu.yd. rock excavation	2.00	3.80	7.00	5.00	3.00	6.50	5.00	6.00	4.50	4.00
Gravel refill	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	1.40	.....
135 M ft. b.m. spruce lumber	25.00	16.00	25.00	10.00	24.00	26.00	25.00	28.00	20.00	27.00
10 M ft. b.m. spruce lumber 2 in. planed and matched	30.00	30.00	35.00	30.00	30.00	26.00	35.00	35.00	40.00	34.00
15 M ft. b.m. spruce lumber 3 in. to 6 in. planed and grooved	30.00	50.00	0.00	30.00	40.00	40.00	40.00	40.00	60.00	36.00
5 M ft. b.m. pile caps platform	40.00	30.00	35.00	35.00	30.00	0.00	0.00	28.00	35.00	40.00
1600 lin.ft. pipe underdrain	0.50	0.20	0.25	0.15	0.23	0.15	0.50	0.35	0.25	0.10
2400 cu.yd. Class A concrete	7.00	7.50	7.00	7.00	7.46	8.00	8.00	8.00	9.00	7.35
40 cu.yd. Class A general concrete	7.00	7.50	7.00	7.00	6.92	8.00	6.00	7.00	9.00	6.80
Class A concrete mixed with hydrated lime	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	.....
300 cu.yd. Class B concrete	6.00	6.50	5.50	6.00	6.00	6.00	5.00	6.00	8.50	6.50
275 cu.yd. Class C concrete	5.00	5.50	0.00	5.50	5.00	5.00	5.00	4.50	8.00	5.00
100 lin.ft. 10 in. pipe catch basin drain	1.00	1.00	1.00	1.00	1.85	0.50	1.00	1.00	2.00	0.66
100 lin.ft. pipe for chimneys	0.15	0.15	0.35	0.35	0.18	0.50	0.50	1.00	0.25	0.10
575 lin.ft. P.H. drain under concrete and brick sewer pipe	1.00	0.80	1.00	1.00	2.00	1.00	0.50	0.75	0.75	0.50
40 lin.ft. relaying existing house drain	1.00	0.80	1.00	1.00	1.00	0.00	0.50	1.00	1.50	0.75
25 lin.ft. relaying other existing drain, house or catch basin drain	1.00	0.80	1.00	1.00	1.50	0.00	0.50	1.00	1.50	0.75
Y's placed	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	.....
Slants or connections placed	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	.....
135 slants or connections placed, new work	0.10	0.10	0.35	0.25	0.65	1.00	1.00	0.25	0.15	0.15
40 lin.ft. laying and connecting 3 in. to 8 in. metal pipe	1.00	0.20	1.00	1.00	0.30	1.00	0.50	1.00	0.50	0.75
Steel rods or bars	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	50.00	.....
8 man holes on sewer	80.00	135.00	75.00	95.00	75.00	70.00	75.00	90.00	125.00	60.00
5 man holes on surface drain	50.00	65.00	50.00	50.00	45.00	40.00	40.00	50.00	50.00	40.00
3 special inlet man holes	80.00	135.00	90.00	90.00	100.00	70.00	65.00	90.00	125.00	65.00
1 specially combined sewer and gate house	80.00	135.00	100.00	125.00	100.00	100.00	75.00	100.00	150.00	75.00
1 man hole built over old sewer	50.00	50.00	50.00	75.00	60.00	70.00	40.00	50.00	45.00	55.00
4 catch basins built	55.00	55.00	60.00	60.00	60.00	50.00	60.00	50.00	75.00	55.00
Existing man hole inverts and retaining wall	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	.....
120 cu.yd. brick masonry	18.00	16.00	15.00	16.00	120.00	14.00	12.00	16.00	20.00	15.00
Catch basin traps, taken out, reset	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	.....
Guttermouths	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00	.....
3 connections between new and existing conduits	5.00	5.00	25.00	10.00	50.00	25.00	25.00	25.00	30.00	15.00
Single strength sewer pipe	65%	60%	72%	72%	75%	70%	73%	75%	50%	68%
Double strength sewer pipe	50%	54%	62%	48%	60%	60%	50%	75%	50%	55%
Protecting of buildings	50.00	600.00	100.00	100.00	500.00	1000.00	1000.00	200.00	100.00	500.00
420 lin.ft. removing old sewer or drains	1.00	0.25	0.25	0.50	0.25	0.00	0.50	1.00	0.50	0.30
Extended totals	$54,120	$54,983	$56,459	$58,954	$59,139	$59,959	$62,204	$62,874	$63,707	$54,666

VESSELS UNDER CONSTRUCTION, UNITED STATES NAVY

The Navy Department, Bureau of Construction and Repairs, reports the following vessels under construction and the progress toward completion:

Name, Type and Number of Vessel	Contractor	Per Cent. of Completion May 1, 1915 Total	On Ship	Apr. 1, 1915 Total	On Ship
Battleships:					
36 "Nevada"	Fore River Shipbuilding Co.	91.7	90.9	89.7	87.9
37 "Oklahoma"	New York Shipbuilding Co.	92.9	92.9	90.7	90.6
38 "Pennsylvania"	Newport News Shipbuilding Co.	76.9	72.1	73.9	68.5
39 "Arizona"	New York Navy Yard	59.2	55.4	56.4	52.0
40 "California"	New York Navy Yard	00.0	00.0	00.0	00.0
41 "Mississippi"	Newport News Shipbuilding Co.	17.9	13.3	14.6	...
42 "Idaho"	New York Shipbuilding Co.	25.2	10.0	20.3	6.9
Destroyers:					
51 "O'Brien"	Wm. Cramp & Sons	97.3	97.3	96.9	96.9
52 "Nicholson"	Wm. Cramp & Sons	Delvd. 4/30/15		96.9	96.8
53 "Winslow"	Wm. Cramp & Sons	92.0	91.8	91.4	91.2
55 "Cushing"	Fore River Shipbuilding Co.	92.0	91.9	88.0	87.6
56 "Ericsson"	New York Shipbuilding Co.	96.3	96.3	95.4	95.4
57 "Tucker"	Fore River Shipbuilding Corporation	61.7	57.7	49.5	45.2
58 "Conyngham"	Wm. Cramp & Sons	67.5	65.3	64.2	62.1
59 "Porter"	Wm. Cramp & Sons	66.3	63.9	62.5	60.2
60 "Wadsworth"	Bath Iron Works	91.2	91.2	85.1	85.0
61 "Jacob Jones"	New York Shipbuilding Co.	68.0	67.5	66.3	64.8
62 "Wainwright"	New York Shipbuilding Co.	66.9	66.4	63.8	62.3
63	Fore River Shipbuilding Corporation	19.5	12.7	11.7	...
64	Fore River Shipbuilding Corporation	18.6	9.8	11.7	...
65	Bath Iron Works	10.5	3.9	7.6	...
66	Bath Iron Works	10.5	3.9	7.8	...
67	Wm. Cramp & Sons	7.3	1.5	4.2	...
68	Mare Island Navy Yard	0.0	...	0.0	...
Destroyer Tenders:					
2 "Melville"	New York Shipbuilding Co.	88.0	87.9	83.4	83.1
Submarine Tenders:					
2 "Bushnell"	Seattle Construction & Drydock Co.	88.3	83.5	86.2	81.2
Fuel Ships:					
13 "Kanawha"	Mare Island Navy Yard.	100.0	100.0	99.2	99.2
14 "Maumee"	Mare Island Navy Yard.	87.3	86.7	81.3	80.7
15 "Cuyama"	Mare Island Navy Yard.	0.0	0.0	...	...
Miscellaneous:					
Supply Ship No. 1	Boston Navy Yard	13.4	4.4	11.5	2.8
Transport No. 1	Phila. Navy Yard	13.4	6.3	11.5	...
Panama Canal Colliers:					
"Ulysses"	Maryland Steel Co.	Delvd. 4/17/15		97.5	97.0
"Achilles"	Maryland Steel Co.	96.8	92.9	90.3	84.9
Submarines:					
27 G-2	*Lake T. B. Co. (Bridgeport)	89.7	89.7	89.7	89.7
31 G-3	*Lake T. B. Co. (Bridgeport)	88.6	88.4	88.6	88.4
40 L-1	Electric Boat Co. (Quincy)	95.8	95.8	92.2	92.0
41 L-2	Electric Boat Co. (Quincy)	97.0	97.0	90.2	89.9
42 L-3	Electric Boat Co. (Quincy)	90.3	90.3	88.9	88.3
43 L-4	Electric Boat Co. (Quincy)	90.0	90.0	85.8	84.2
44 L-5	Lake T. B. Co. (Bridgeport)	66.8	62.6	63.0	58.9
45 L-6	Lake T. B. Co. (Long Beach, Calif.)	59.0	53.6	55.8	50.4
46 L-7	Lake T. B. Co. (Long Beach, Calif.)	57.2	51.4	54.7	48.8
47 M-1	Electric Boat Co. (Quincy)	73.3	68.1	70.0	64.7
48 L-8	Portsmouth, N. H., Navy Yard	26.3	24.2	18.2	15.5
49 L-9	Electric Boat Co. (Quincy)	66.0	58.1	60.7	52.3
50 L-10	Electric Boat Co. (Quincy)	64.3	55.3	59.9	50.5
51 L-11	Electric Boat Co. (Quincy)	52.7	42.0	46.4	36.0
52 ...	Electric Boat Co. (Quincy)	0.0	...	...	...
53 N-1	Electric Boat Co. (Seattle)	0.0	...	...	...
54 N-2	Electric Boat Co. (Seattle)	0.0	...	...	...
55 N-3	Electric Boat Co. (Seattle)	0.0	...	...	...
56 N-4	Lake T. B. Co. (Bridgeport)	14.5	11.4	9.4	...
57 N-5	Lake T. B. C. (Bridgeport)	11.9	8.6	...	...
58 N-6	Lake T. B. Co. (Bridgeport)	11.2	7.9	...	...
59 N-7	Lake T. B. Co. (Bridgeport)	11.2	7.9	...	...

*Contracts forfeited, vessels being completed by New York Yard.

CATALOG NOTICES

The Jeffrey Mfg. Co., Columbus, Ohio. Bulletin No. 165. Wagon and truck loaders for crushed stone, sand, etc. Illustrated, 16 pp., 6x9 in. Bulletin No. 166. Wagon and truck loaders for bituminous and anthracite coal. Illustrated, 24 pp., 6x9 in.

Link-Belt Co., Philadelphia, Penn. Book No. 210. Wagon and truck loaders for coal, coke, stone, sand, etc. Illustrated, 48 pp., 6x9 in.

Dodge Sales and Engineering Co., Mishawaka, Ind. Catalog. Gearing. Illustrated, 126 pp., 6x9 in.

Kerr Turbine Co., Wellsville, N. Y. Bulletin No. 52. Economy turbo-pumps. Illustrated, 24 pp., 6x9 in.

The Jarvis-Morse Corp., 90 West St., New York. Catalog. Morse destructor. Illustrated, 20 pp., 6x9 in.

Smith Engineering Works, Milwaukee, Wis. Pamphlet. Portable crushing plants. Illustrated, 24 pp., 6x9 in.

Hanna Engineering Works, Chicago, Ill. Catalog No. 3. Pneumatic riveters. Illustrated, 64 pp., 6x9 in.

Kennedy-Stroh Corporation, 120 Broadway, New York. Catalog Section B. Ore milling, cyaniding and smelting machinery. Illustrated, 86 pp., 6x9 in.

The Marion Steam Shovel Co., Marion, Ohio. Catalog No. 93. "Marion Reliability and Your Profits." Illustrated, 48 pp., 5½x8 in.

Smooth-On Mfg. Co., 572-74 Communipaw Ave., Jersey City, N. J. Pamphlet No. 4. Smooth-On Iron Cement No. 7 for waterproofing brick and concrete construction. Illustrated, 4 pp., 6x9 in.

Ohio Locomotive Crane Co., Bucyrus, Ohio. Catalog. Locomotive cranes. Illustrated, 56 pp., 8x10½ in.

The Holt Mfg. Co., Inc., Stockton, Calif. Bulletin A 60-108. Holt Caterpillar "45." Illustrated, 32 pp., 7x10 in.

Myers-Whaley Co., Knoxville, Tenn. Catalog No. 5. Shoveling machines for underground and surface work. Illustrated, 28 pp., 8½x10 in.

Hydrated Lime Bureau, Oliver Bldg., Pittsburgh, Penn. Pamphlet. "Hydrated Lime for Concrete." Four pp., 3½x6 in.

CALIFORNIA STATE HIGHWAY, MONTEREY COUNTY
Division V, Route 2, Section E

Bids were received Apr. 26 by the State Highway Commission, Forum Bldg., Sacramento, for constructing Division V, Route 2, Section E, of the State Highway, in Monterey County, from: (A) James Fitzpatrick, Sacramento; (B) W. A. Dontanville, Paso Robles; (C) Highway Paving & Construction Co., Palo Alto; (D) Bent Bros., Los Angeles; (E) Engineer's Estimate. The state furnishes pipe railing for culverts, reinforcing-steel, corrugated iron pipe and portland cement, to cost $25,467. The item bids were as follows:

	A	B	C	D	E
9900 cu.yd. excavation, unclassified	$0.60	$0.49	$0.60	$0.90	$0.30
600 lin.ft. 12-in. corrugated iron pipe	0.60	0.50	0.50	0.53	0.50
60 lin.ft. 15-in. corrugated iron pipe	0.75	0.50	0.75	0.60	0.55
30 lin.ft. 18-in. corrugated iron pipe	1.00	0.50	1.00	1.00	0.60
34 lin.ft. 36-in. corrugated iron pipe	2.00	1.00	1.00	2.00	1.00
53 cu.yd. concrete, Class B (culverts and monuments)	14.00	15.00	10.50	20.00	12.00
7185 cu.yd. concrete pavement, Class B	8.00	11.75	6.15	8.46	7.50
600 lin.ft. guard rail	0.40	0.50	0.40	1.00	0.40
60 monuments, hauling and setting	1.00	1.00	1.00	1.25	0.50
Extended totals	$64,965	$90,809	$51,393	$71,882	$58,148

STORM-WATER SEWERS, READING, PENN.

Bids were received Apr. 30 by the City Council, Reading, Penn., for the construction of storm-water sewers on Elm and West Elm St. from the Schuylkill Canal to Rose St. from: (A) Fehr & O'Rourke; (B) CANTRELL CONSTRUCTION CO., Real Estate Trust Bldg., Philadelphia (awarded contract); (C) James Ferry & Sons, Inc.; (D) Union Paving Co.; (E) Heyman & Goodman Co. The item bids were as follows:

	A	B	C	D	E
200 lin.ft. 5-in. circular concrete sewer in open cut	$22.20	$20.80	$32.75	$39.00	$20.00
2300 lin.ft. 5-in. circular concrete sewer, tunnel lining	22.20	17.28	22.35	22.10	24.40
82 lin.ft. 4x7 ft. 10-in. reinforced concrete sewer	41.25	61.00	45.00	82.00	60.00
50 lin.ft. silt basin	27.00	90.00	40.00	48.00	43.00
20 lin.ft. 18-in. vitrified pipe sewer	2.25	3.00	3.50	2.45	6.00
300 lin.ft. 15-in. vitrified pipe sewer	1.75	2.50	3.00	2.45	4.00
100 lin.ft. 10-in. vitrified pipe sewer	1.25	1.25	2.00	1.60	3.60
24½ lin.ft. reinforced 2 ft. 8 in. x 4 to 5-ft. junction chamber	19.50	9.00	30.00	46.50	20.00
24½ lin.ft. reinforced 5 to 6 ft. 8 in. x 7½-ft. junction chamber	37.50	45.00	50.00	47.00	30.00
130 vert. ft. reinforced-concrete manhole	27.30	10.80	6.00	68.00	160.00
20 vert. ft. concrete manhole, storm sewer	6.00	5.00	5.00	10.00	30.00
20 vert. ft. concrete manhole, house sewer	6.00	5.00	5.00	10.00	30.00
1 plate "C" basin, 8-in. radius, with connection	125.00	120.00	100.00	100.00	120.00
4 plate "C" basins, 6-in. radius, with connection	125.00	115.00	90.00	80.00	120.00
7 plate "I" basins, 6 in. long, with connection	125.00	110.00	85.00	50.00	100.00
30 M ft. b.m. lumber in place	20.00	1.00	25.00	45.00	30.00
100 cu.yd. excavation, unclassified, including backfill	1.50	1.00	2.50	3.50	3.00
1 cu.yd. concrete in place	6.50	8.00	.....	16.00	25.00
Extended totals, including 10% for contingencies	$75,206	$64,631	$76,791	$90,986	$104,082